## 兴趣特长培养生涯规划发展

Continuous development of student's passion, interests, and career

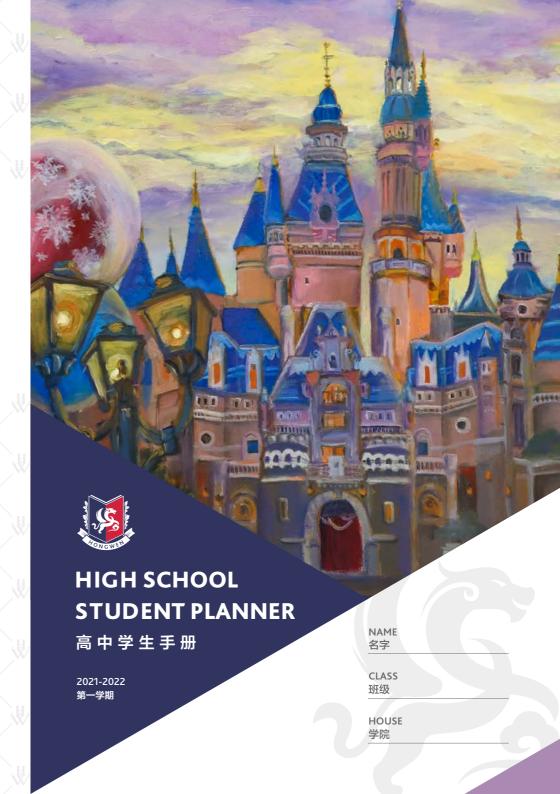


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# SHHW Calendar --- updated on 2021.6.30 宏文上海校区校历

2021 \ 2022

			_	_	_		_		
Days	Month	S	М	Т	W	Т	F	S	Items
• 16-Aug Admir	1-Aug~3-Aug New G6 training 8月1日~3日 新六年级集训 ●16-Aug Admin & SMT report to work 8月16日 行政、后勤、教辅、								
		8	9	10	11	12	13	14	管理层上班  ●17-Aug New staff report to work & Training 8月17日 新员工报到、
		15	16	17	18	19	20	21	培训
	8月	22	23	24	25	26	27	28	● 18-Aug Existing staff report to work 8月18日 老教师报到 19-Aug-20-Aug HWS training 8月19日~20日 三校统一培训
1/11	AUG	29	30						● 23-Aug~25-Aug SHHW training & Classroom decoration & Preparations 8月23日~25日 本校区培训;教室布置;备课
	2021								● 26-Aug New students report to school (PTM with homeroom teachers) 8月26日 新生报到;新生家长与班主任见面; ● 27-Aug-31-Aug Orientation days for new students (ECA trial day & Streaming test & School team selection) 8月27日−31日 新生入学教育(含ECA体验日;分层测试;校队选拔) ● 31-Aug Existing students report to school 8月31日 老生返校
					1	2	3	4	● 1-Sep S1 commences & Opening ceremony 9月1日 第一学期开始&
		5	6	7				11	一 开学典礼 ● 10-Sep Teachers' Day celebration 9月10日 教师节庆典
		12						18	● 13-Sep ECA & school teams start 9月13日 ECA开始/校队开始 ● 13-Sep~16-Sep Parents Engagement Night 9月13日~16日 家长会
	9月	19	20	21				25	(家长之夜) ● 18-Sep Workday (Follow Monday's timetable) 9月18日 上班(上周
22/22	SEPT	26	27	28	29				一的课) ● 19-Sep~21-Sep Mid-Autumn Festival 9月19日~21日 中秋节假期
	2021								• 26-Sep Workday (Follow Tuesday's timetable) 9月26日 上班(上周二的课)
									● 28-Sep Commenmorating Confucius' birth 9月28日 纪念孔子活动 ● 29-Sep Anniversary Celebration (3 years) 9月29日 校庆日(三周
									年) • 30-Sep Sports Day for secondary students(AM) & Students' hometime at 13:00 9月30日 上午中学生运动会;学生13:00放 学
							1	2	●1-Oct~7-Oct National Day holiday 10月1日~7日 国庆节假期 ●9-Oct Workday (Follow Wednesday's timetable) 10月9日 上班(上
	_	3	4	5	6	7			周三的课) • 25-Oct-29-Oct Internal Parents' Open Day 10月25日~29日 校内家
17/17	10月 OCT	10						16	K开放日
17717	2021	17						23	
		24	25				29	30	
		31							
								6	●8-Nov-12-Nov Mid-term exams 11月8日~12日 期中考试 ●20-Nov Transfer student test 11月20日 转校生插班考
	11月	7						13	• 22-Nov-26-Nov PTMs 11月22日~26日 家长接待周
22/22	NOV	14						20	
	2021	21						27	
		28	29						
					1	2	3	4	• 13-Dec~15-Dec Technology festival 12月13日~15日科技节
	12月	5	6					11	• 21-Dec Xmas & New Year celebration(include music concert & bazaar) 12月21日 圣诞迎新音乐会(含圣诞和新年集市)
23/23	DEC	12						18	● 22-Dec~24-Dec Study tour 12月22日~24日 户外探究研学周 ● 27-Dec Revision start 12月27日 开始期末总复习
	2021	19						25	• 31-Dec Students' hometime at 13:00 12月31日 学生13:00放学
		26		28	29				

Days	Month	S	М	T	W	T	F	S	Items
								1	● 1-Jan~3-Jan New Year's Day holiday 1月1日~3日 元旦假期
		2	3					8	● 4-Jan-7-Jan Oral tests & Lab practical tests 1月4日~7日 口试、实验者
12/12	1月 JAN	9						15	● 10-Jan~14-Jan End-of-term exams 1月10日~14日 期末考试 ● 17-Jan~19-Jan Paper correction, winter holiday assignment,
12/12	2022	16				20	21	22	classroom clean up, make up for paid ECA, refresh school teams, semester completion ceremony, semester housewinner activity 1月
		23	24	25	26	27	28	29	17日~19日 讲评试卷、寒假作业布置、整理教室、ECA补课,校队吐故纳新,各学部结业式及表彰活动,学期学院冠军活动
		30	31						● 20-Jan-16-Feb Winter holiday for students & Training for some school teams 1月20日-2月16日 学生寒假;部分校队有集训
				1	2	3	4	5	● 13-Feb Admin & SMT report to work 2月13日 行政、后勤、教辅、 管理层上班
	2月	6	7	8	9	10	11	12	● 14-Feb-15-Feb Teachers report to work & Training & Preparation 2月 14日~15日 教师报到、培训、备课
8/11	FEB	13	14	15	16			19	*** 16-Feb New students report to school(PTM with homeroom teachers) & School teams selection for new students 2月16日 新转
	2022	20						26	校生报到并与班主任见面;新转校生校队选拔 • 17-Feb S2 commences & Opening ceremony 2月17日 第二学期开始
		27	28						● 77-Feb 32 continuences & Opening ceremony 2月77日第二子朔开始 &开学典礼 ● 28-Feb ECA and school teams start 2月28日 ECA开始/校队开始
				1	2	3	4	5	●7-Mar~11-Mar PTMs & Book week 3月7日~11日 家长接待周/阅读
	2.0	6	7					12	周 ● 28-Mar~1-Apr Subjects festival 3月28日~4月1日 学科节
23/23	3月 MAR	13						19	
	2022	20						26	
		27		29					
							1	2	● 2-Apr Workday (Follow Monday's timetable) 4月2日 上班(上周一
	4月	3	4	5	6	7		9	的课) ● 3-Apr~5-Apr Tomb Sweeping Days 4月3日~5日 清明节假期
20/20	APR	10		12				16	● 18-Apr~22-Apr Mid-term exams 4月18日~22日 期中考试 ● 25-Apr~28-Apr Internal Parents' Open Day 4月25日~28日 校内家
	2022	17						23	长开放日 ● 29-Apr Sports Day for primary students(AM) & Students' hometime
		24					29	30	at 13:00 4月29日 上午小学生运动会;学生13:00放学
		1	2					7	● 30-Apr-2-May Labour Day holiday 4月30日-5月2日 劳动节假期 ● 11-May-13-May Study tour 5月11日~13日 户外探究研学周
	5月	8						14	● 21-May Transfer student test 5月21日 转校生插班考
21/21	MAY	15						21	<ul> <li>25-May-27-May Art festival 5月25日-27日 艺术节</li> <li>30-May-2-Jun Music festival (includes drama show) 5月30日~6月2 日音乐节(含音乐剧演出)</li> </ul>
	2022	22			25	26	27	28	ロロかけ(百日が脚次山)
		29	30	31					
							3	4	● 3-Jun~5-Jun Dragon Boat Festival 6月3日~5日 端午节假期 ● 6-Jun Revision start 6月6日 开始期末总复习
		5						11	• 13-Jun-17-Jun Oral tests & Lab practical tests 6月13日~17日 口试、 实验考
		12						18	● 17-Jun ECA show in the evening 6月17日晚上ECA汇报演出 ● 20-Jun~24-Jun End-of-term exams 6月20日~24日 期末考试
21/21	6月	19					24	25	* 27-Jun~29-Jun Paper correction, winter holiday assignment, classroom clean up, make up for paid ECA, refresh school team,
21/21	JUN 2022	26	27	28	29	30			semester completion ceremony, semester housewinner activity 6月
									27日-29日 讲评试卷、暑假作业布置、各学部结业式及表彰活动、学期学院冠军活动;收费ECA补课,校队吐放纳新  30-Jun G5 graduation ceremony(AM), classroom clean up, students' hometime at 13:00 & Staff meeting(PM) 6月30日 上午小学5年级毕业典礼;整理教室;学生13:00放学;下午教职工总结大会



### Total Days / 总计天数



Student / 学生: 190 days



Teacher / 老师: 203 days

Memo:Some Holidays Are Subject to Change Due to Government's Arrangement 某些节假日可能会根据政府安排再做调整

1st Semester Commences on Sep 1, 2021

第一学期于 2021 年9月1日开学

2nd Semester Commences on Feb 17, 2022

第二学期于 2022 年2月17日开学

Please Paste On The Timetable For This Semester 本学期课程表粘贴处

### 中小学生守则

### **Elementary & Secondary School Student Rules**

### 爱党爱国爱人民

了解党史国情,珍视国家荣誉,热爱祖国,热爱人民,热爱中国共产党。 Love the country, the Party and the people;

### 好学多问肯钻研

上课专心听讲,积极发表见解,乐于科学探索,养成阅读习惯。

Have eagerness to learn;

### 勒劳笃行乐奉献

自己事自己做,主动分担家务,参与劳动实践,热心志愿服务。

Work hard and be willing to help others;

### 明礼守法讲美德

遵守国法校纪,自觉礼让排队,保持公共卫生,爱护公共财物。

Obey rules, be respectful, and practice moral excellence;

### 孝亲尊师善待人

孝父母敬师长,爱集体助同学,虚心接受批评,学会合作共处。

Show filial respect for parents, respect teachers, and be kind to others;

### 诚实守信有担当

保持言行一致,不说谎不作弊,借东西及时还,做到知错就改。

Be honest and trustworthy;

### 自强自律健身心

坚持锻炼身体,乐观开朗向上,不吸烟不喝酒,文明绿色上网。

Be self-disciplined and build a healthy mind and body;

### 珍爱生命保安全

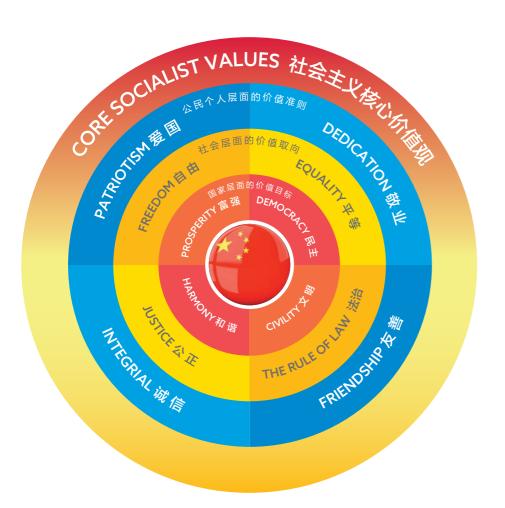
红灯停绿灯行,防溺水不玩火,会自护懂求救,坚决远离毒品。

Cherish life and be safe;

### 勤俭节约护家园

不比吃喝穿戴,爱惜花草树木,节粮节水节电,低碳环保生活。

Work hard, be frugal with resources, and protect your homeland.



## 宏文学校上海浦东校区三基三规三达标

### Hongwen School Shanghai Pudong Campus Regulations and Standards

年级	落实校训	三项基本要求	三个规范形成	三个能力达标
一年级	慎独 仁爱	1.爱清洁、讲卫生 2.守纪律、能守时 3.有礼貌、会友爱	1.勤洗手、爱护书本课桌、不乱扔垃圾 2.不迟到早退、不乱跑、课上坐姿端正、课前准备好 学习物品 3.礼貌用语:您好、请、谢谢等,不随便拿别人物品	1.个人卫生达标 2.课堂常规达标 3.文明礼仪达标
二年级	1—友	1.着装礼仪、精神面貌 2.有时间观念 3.互帮互助、谦和礼让	1.保持衣冠整洁、精神饱满、礼貌待人 2.按时参加各类活动、按时完成作业和任务 3.乐于助人、不争吵、不计较、不闹情绪	1.仪容仪表达标 2.课堂参与达标 3.团结互助达标
三年级	慎独 仁爱 勤奋	1. 爱护班级和集体荣誉 2. 积极思考、勇于表达 3. 对人友善、爱心互助	1.主动维护班级整洁、积极为集体争荣誉 2.入班即静、入校即学、完成任务好又快 3.不欺负同学、主动帮助他人进步	1.班级整洁达标 2.学习态度达标 3.沟通交往达标
四年级	慎独 仁爱 勤奋 坚毅	1.爱护校园、保护环境 2.学习努力、保持进步 3.关心集体、诚实做事	1.遵守校规校纪、爱护公共财产 2.上课积极参与、按时完成作业 3.培养团队精神、团结互助、欣赏他人	1.爱护校园达标 2.学习习惯达标 3.意志坚定达标
五年级	慎独 仁爱 勤坚毅 惟新	1.言谈知礼、举止文明 2.勤勉好学 3.坚毅进取	1.公共场所行为礼仪、言谈举止大方得体 2.学习有计划、努力有目标 3.挑战自我、迎难而上、勇于突破	1.模范表率达标 2.学习收获达标 3.自我提升达标
六年级	慎独 仁爱	1.规范着装,举止文明 2.勤奋好学,善于思考 3.乐于沟通,积极合作	1.大型集会校会、早操时规范着装,言谈举止文明得体 2.学习勤奋刻苦,敢于发言,善于思考 3.具有良好的沟通能力和团队合作能力	1.文明规范达标 2.学习探究达标 3.团队合作达标
七年级	勤奋 坚毅	1.诚实守信,言行一致 2.积极进取,踏实努力 3.悦纳自我,珍爱生命	1.答应他人的事要做到,不说谎,不骗人,不弄虚作假,知错就改 2.学习勤奋踏实,努力拼搏,勇于挑战自己 3.悦纳自我和他人,学会感恩,懂得怜悯,与人为善	1.言行举止达标 2.学习态度达标 3.生命教育达标
八年级		1.明辨是非,严于律己 2.持之以恒,锐意求新 3.关心他人,热心公益	1.形成是非对错判断的标准,并严格要求自己 2.树立正确的目标,坚持不懈地努力,求异求新 3.关心同学,积极参与学校和社会组织的公益活动	1.思想品德达标 2.意志品质达标 3.公益活动达标
九年级	慎独 仁爱 勤奋 坚毅 惟新	1.自我管理 2.博学笃志 3.直面挫折	1.能够正确评价自己,管理自己并不断提升自己 2.广泛涉猎各类书籍,拓宽知识面,树立目标 3.提高心理韧性,积极应对压力与挫折	1.综合素养达标 2.学习能力达标 3.耐挫能力达标
十年级		1.胸襟开阔 2.坚守诚信 3.践履惟新	1.尊重理解多元文化,树立正确的价值观,对其他个体和 社会群体的观点采取开放和包容的态度 2.恪守学术道德,弘扬学术诚信 3.勇于探究,不断创新,形成初步的生涯规划,求真求实	1.社会理解达标 2.学术诚信达标 3.探究学习达标

Grade	School motto implement	Three basic requirements	Three codes of conduct	Three standardized abilities
Grade 1	Moderation Kindness	Be clean and tidy     Be disciplined and     punctual     Be polite and friendly	1. Wash hands frequently, take good care of books and desks, and do not litter. 2. Don't be late or leave early, don't run around; Sit upright in the class, and prepare learning materials in advance. 3. Polite expressions: Hello, please, thank you, etc. Don't take others' belongings."	Personal hygiene     Class routine     Civilized etiquette
Grade 2	Killditess	Be well dressed and in good mental state     Know how to manage time well     Be helpful and modest	Keep clothes clean, be energetic and polite.     Participate in all kinds of activities on time, and complete the assignments and tasks on time.     Be willing to help others, do not quarrel or get emotional.	Appearance     Class participation     Unite and help     each other
Grade 3	Moderation Kindness Diligence	1. Have sense of team spirit strive for honor for teams . 2. Think positively and he willing to express tasks efficiently.		Classroom cleanliness and tidiness.     Learning attitude     Communication
Grade 4	Moderation Kindness Diligence Perseverance	Protect campus and environment     Study hard and keep improving     Care for others and teams, and be honest	Abide by school disciplines and protect public property.     Actively participate in class and finish homework on time.     Cultivate team spirit, unite, help and appreciate each other.	Take good care of the campus     Learning habits     Perseverance
Grade 5	Moderation Kindness Diligence Perseverance Innovation	Be polite and civilized in speech and behavior     Be diligent and studious     Be perseverant	Speak and behave appropriately in public.     Study in a planned way and strive for a goal.     Challenge yourself, face the difficulties and make breakthroughs.	Be good example     Learning gains     Self improvement
Grade 6	Moderation Kindness	Be well dressed and civilized in behavior     Be studious and thoughtful     Be willing to communicate and cooperate actively	Dress in a standard way in school assembly and morning exercises; speak and behave in a civilized manner.     Study hard, speak up and be good at thinking.     Good communication and teamwork skills.	Civilization and norms     Learning and inquiry     Team work
Grade 7	Diligence Perseverance	Be honest and trustworthy     Be proactive and practical     Accept yourself and cherish life	Keep promise, don't lie or cheat. Own up to your mistake and be responsible for your behavior.     Work hard and challenge yourself.     Accept yourself and others, learn to be grateful, empathetic and kind to others.	Behavior     Learning attitude     Life education
Grade 8		Distinguish right from wrong and be strict with yourself 2. Persevere and strive for innovation     Care for others and be public-spirited	Have a correct view of right and wrong and be strict with yourself.     Set up a correct goal, make unremitting efforts and seek for differences and innovations.     Care for students and actively participate in public welfare activities organized by the school and society.	Ideology and morality     Will and quality     Public welfare activities
Grade 9	Moderation Kindness Diligence Perseverance Innovation	Self management     Be erudite and diligent     Face up to setbacks	Self evaluation, self management and self improvement.     Read more books, broaden your horizon and set goals.     Improve psychological quality and be positive and powerful.	Comprehensive quality     Learning ability     Frustration tolerance
Grade 10		Be open-minded     Be honest and trustworthy     Be innovative	Respect and understand multi culture, establish correct values and be inclusive.     Abide by academic ethics and promote academic integrity.     Be an inquirer and innovator, form a preliminary career plan and be realistic.	Social understanding     Academic integrity     Inquiry learning



### 办学宗旨 Mission

以人为本、中西融合、塑造精英。

Student-centered, Integration of east and west, Elite education.

### 校园文化 Campus Culture 宏扬科学精神,文化陶冶情操。

Propagate the spirit of science. Edify the sentiment with culture.

办学特色 School Characteristics 兴趣特长培养,生涯规划发展。

Continuous development of students' passion, interests and career.

培养目标 School Objectives

通过兴趣培养和特长优势发展, 培养学生成为具有社会贡献力、科学创新力、 世界竞争力的国际化人才。

To help students become giving, devoted, innovative, and competitive international talents by cultivating their interests and developing their strengths.

校训 School Motto

勤奋、仁爱、慎独、坚毅、惟新。

Diligence Kindness Moderation Perseverance Innovation.







# **IB** learner profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

As IB learners we strive to be

#### **INOUIRERS**

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

#### **KNOWLEDGEABLE**

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

#### THINKER!

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

#### COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

#### PRINCIPI FO

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

#### **OPEN-MINDED**

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

#### CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

#### RISK-TAKER

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

#### **BALANCED**

We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

#### REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.

### 国际文凭学习者培养目标

所有IB计划的目标都是培养具有国际意识的人,他们认识到他们共同的人性和共同的地球守护者,帮助创造一个更美好、更和平的世界。

作为IB学习者,我们努力做到:

#### 积极探究

我们培养自己的好奇心,逐步掌握开展探究和研究的技能。我们知道如何独自或与他人一起开展学习。我们对学习充满热情,并终身保持对学习的热爱。

#### 知识渊博

我们发展并利用对概念的理解,跨越一系列学科探索知识。我们对各种具有当地和全球重要性 的问题和思想观点进行探讨。

### 勤于思考

我们运用批判性和创造性思考技能,对复杂的问题进行分析并采取负责任的行动。我们积极主动地做出理由充分、合乎伦理的决定。

### 善于交流

我们使用一种以上的语言,以多种方式充满信心和富有创意地进行自我表达。我们有效地开展 协作,注意倾听他人以及其他群体的观点。

### 坚持原则

我们处事正直、诚实,有强烈的公平和正义感,尊重世界各地人民的尊严和权力。我们对自己 的行动及其后果承担责任。

#### 胸襟开阔

我们以批判的态度欣赏我们自己的文化和个人的历史,以及他人的价值观和传统。我们寻求和 评价一系列广泛的观点,并愿意通过体验来丰富自己。

#### 懂得关爱

我们表现出同理心、同情心和尊重。我们努力开展服务,通过我们的行动使他人的生活和我们 周围的世界发生积极的变化。

#### **勇干些试**

我们深谋远虑和坚决果断地应对变化不定的事物,我们独立地或通过合作探索新的思想观点和 新颖的策略。面对挑战和变化,我们表现得足智多谋和灵活机敏。

#### 全面发展

我们理解在生活中做到智力、身体和情感均衡发展的重要性,这样才能使我们自己和他人幸福 康乐。我们认识到自己与他人以及我们所处世界的相互依存关系。

#### 及时反思

我们对世界和自己的思想观点和经验做出深刻缜密的思考。为了支持我们的学习和个人发展, 我们努力了解自己的长处和弱点。

### >> 重要联系人 Important Contact Information

宏文总校长 / Head Principal

任国芳 / GuoFang Ren renguofang@fehorizon.com

校领导团队 School Leadership Team

高中部校长 / High School Principal

张洁 / Jie Zhang jie.zhang@hongwenfeh.com

执行校长 / Executive Principal

侯晓波 / Harriet Hou houxiaobo01@hongwenfeh.com

党支部书记兼教学事务中心主任 / Party Branch Secretary & Dean

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课程发展中心主任 / Director of Curricular Centre

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高中部校长助理兼招生市场部主管 /

Assistant to High School Principal & Head of Admissions & Marketing Department

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高中科学&计算机 / High School Science & Computer

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教研组长 Subject Leaders 九年级B班班主任 / G9B Homeroom Teacher

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十年级B班副班主任 / G10B Assistant Homeroom Teacher

Celeste Yeo / celeste@hongwenfeh.com

十一年级A班班主任 / G11A Homeroom Teacher

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朱蓓蕾 / Rachel Zhu zhubeilei@hongwenfeh.com

十一年级B班班主任 / G11B Homeroom Teacher

Charlotte Stonehouse / charlotte.stonehouse@hongwenfeh.com

大学升学指导 / University Counselor

潘颖 / Kathy Pan panying3@hongwenfeh.com

招生办联系人 / Admission Office Contacts

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住宿咨询 / Dorm Inquiries

曹铖 / Grant Cao caocheng@hongwenfeh.com

医务室 / School Clinic 021-2036 2122

沈静川 / Sherry Shen shenjingchuan@hongwenfeh.com

财务室 / Finance office

胡颖颖 / Ying Hu huyingying02@hongwenfeh.com

食堂咨询 / Dining Hall Inquiries

李音诺 / Nora Li <u>liyinnuo@hongwenfeh.com</u>

校服咨询 / Uniform Inquiries

张裕 / Steven Zhang zhangyu24@hongwenfeh.com

其他部门





### >> 考勤制度 Attendance

### > 出勤总要求 General Attendance Requirements

我们希望所有的学生都能严格遵照学校的作息时间表和课程表参加每一天的学习和活动。每一学期能准时入学,并保持良好的精神状态和学习状态直到学期结束的最后一天。新学期开始后,走读学生请于每日上午 7:55 前到校,住宿学生请于每个周日晚上 19:00 – 19:30 到校。

All students are required to follow the school schedule. It is important for students to enroll on time for each semester and maintain good study habits until the end of the semester. After the new school year begins, day students must arrive at school by <u>7:55</u>. Boarding students must return to campus between 19:00 and 19:30 on Sundays.

### > 关于迟到 Lateness

如果上午第一节课迟到了,请不要立刻进入教室,而应该向前台老师报告,并填写"学生迟到声明" 交给你的任课老师。你的迟到行为会被记录并报告给你的班主任。

If you are late for class in the morning, please do not enter the classroom directly. Instead, report to the front desk teacher and fill out the "HWS Student Late Notice". Your tardiness will be recorded and reported to your homeroom teacher.

### > 关于请假 Absences

如果你有特殊情况需要请病、事假(包括预约医生或者牙医等),1天病、事假,由班主任批准;2天病、事假,由班主任和年级组长批准;3天及以上病、事假,由班主任和校长室批准;任何请假都请提前邮件告知上述人员或者使用学校内部的校宝线上系统请假。如果是特殊情况,请提前至少2个小时打电话给总机前台,或者微信告知班级群。请注意,你的请假会被记录。

病假2天或以上需提供病例复印件,如传染病需同时告知校医务室,电话:021-20362122。

提早离开学校前,需填写"学生临时离校单",由班主任或任课老师签字确认,学生在家长或者监护人的陪同下,方可离校。

If you need to take personal leave due to special circumstances (including an appointment with a doctor or dentist, etc.), please email the homeroom teacher or ask by online Power School System in advance and follow the procedure below:

- 1-day personal leave must be approved by the homeroom teacher;
- 2-day personal leave must be approved by the homeroom teacher and the grade leader;
- 3 or more days of personal leave must be approved by the homeroom teacher and the Principal.

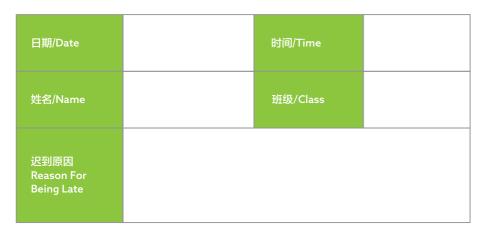
Please notify the appropriate individuals regarding leaves in advance. If it is a special case, please call the front desk at least 2 hours in advance or inform the class group via WeChat. Please note that your leave will be recorded.

If your leave is due to illness, please email the homeroom teacher or ask by online Power School System in advance. If you request 2 or more days of sick leave, you are required to provide a doctor's note. For infectious diseases, please provide the same information to the school clinic at the same time by calling 021-20362122. For any emergency, please call the front desk or Wechat to your class group at least 2

hours in advance. If you need to leave school before the end of the day, you must complete the "HWS Students' Temporary Leave Form" and obtain a signature from your homeroom or subject teacher. You will then be permitted to be picked up by your parent/guardian.

### 学生迟到声明

**HWS Student Late Notice** 



### 学生临时离校单

**HWS Student Temporary Leave Form** 

离校日期/Date	离校时间/Time	
姓名/Name	班级/Class	
离校原因 Reason For Leaving		
老师签字 Teacher's Signature		

### >> 学生行为规范与细则 Student Code of Conduct

### > 关于高中生(九至十一年级)校服着装的要求

Requirements on the Uniform of High School Students (G9-G11)

在校期间,每位学生除了当天有体育课需要穿运动服来校上课,其他时间必须穿正装到学校上课。 参加学校组织的校外活动时也需要按照学校的通知统一穿着校服。班主任每天都要检查学生的校 服,对违规者要进行单独的谈话和指导,并及时纠错。以下是日常校服着装要求:

During the school day, each student must wear a formal suit to school at all times, except on the day when PE class is required. When participating in off-campus activities organized by the school, students should wear uniform according to the school notice. The homeroom teacher should check students' school uniform every day, and have a separate talk with the violators to provide guidance and correct it in time. The following is the daily uniform dress code:

周一至周五:女生着正装并佩戴校服领花,男生着西装并佩戴校服领带,冬天允许在正装外面穿棉外套:

From Monday to Friday: girls wear school uniform with neckties; boys are in suits with school uniform tie. The coat is allowed in winter:

● 学生必须在校服标签上用不易掉色的笔写上自己的姓名和班级;

School uniform must be labeled with name and class in indelible pen;

● 学生必须穿深色袜子、深色运动鞋或深色皮鞋;

Students must wear dark socks and dark sneakers or dark leather shoes:

学生可以选择使用学校统一购买的或自备的深色书包,用不易掉色的笔写上自己的姓名和班级;

Students can choose to use the school or own backpacks labeled with name and class in indelible pen;

● 学生在参加学院活动时必须穿着所属学院的服装。

Students must wear the house uniform when taking part in house activitiies.

### 校服公司客服联系方式 School Uniform Company Customer Service Contact

飒美特校服微信商城已开通,家长可以通过微商城联系在线客服解决疑问,也可以致电400-822-9096 转 1 号键进行电话咨询或致电校服公司廖经理 18321820656。

Sameite Hongwen School Uniform Wechat mall has been opened. Parents can contact online customer service and dail 400-820-9096 and press 1 or call Ms.Liao 18321820656 to solve the problems or questions.

飒美特校服丰页。www.sameite.com

Sameite School Uniform Website: www.sameite.com

客服邮箱: sameite@bosideng.com

E-mail: sameite@bosideng.com

### 校服购买方式 Purchase of school uniforms

飒美特校服微信商城已开通,家长通过扫描二维码进入商城后,点击"校服订购",在下一页面输入: HWSSHPD,进入上海校区的校服订购界面进行订购。

Sameite Hongwen School Uniform Wechat mall has been opened. Parents enter the mall by scaning the twodimensional code ahead, pressing the "Uniform Purchasing", inputing "HWSSHPD" and then starting purchasing the uniforms.

飒美特宏文校服 Sameite hongwen school uniform



### > 对学生的期望 Expectations for students

作为上海浦东新区民办宏文学校的一名学生,我们希望你能学会承担责任,成为一名具有良好行为习惯,充满爱心,富有勇气,拥有显著特长,不断创新的宏文学子。

As a HWS student, you are expected to learn to take responsibility for your actions and become an innovative individual with good behavior, love, courage, and outstanding skills.

### 关于日常行为 Expectations for Daily Behavior

- 以一种富有责任感、同理心和有礼貌的行为方式要求自己。
- 每天整齐地穿戴相应的校服。
- 积极主动地参与各学科的学习,并完成学习目标,合理高效地安排自己的时间,养成良好的学习习惯。
- 在与他人交流的过程中,理解和包容不同文化背景的差异,尊重学校里所有的学生、老师和工作人员。团结友爱,互相帮助,和睦相处。
- 关心并爱护校内的公共设施和公共物品,保持学习环境的整洁,轮流参加教室大扫除。尊重他人的私人物品,杜绝各种形式的资源浪费。

- Be responsible, empathetic, and polite;
- Dress properly in school uniform every day;
- Be a positive learner, reach the learning objectives, and manage your time reasonably and effectively;
- Respect other cultures; respect all students, teachers and staff in the school; be cooperative, helpful and amicable;
- Protect and take care of public facilities and goods, keep your learning environment clean and tidy, and take turns to do classroom cleaning; do not waste resources.

### 关于乘坐校车 Taking School Bus

- 提前到达校车指定站点候车,听从校车妈咪的安排。为了保障整条校车线路正常到校,若早上超过2分钟以上未到达指定站点上车,校车将不再等待,届时需由家长亲自送你至学校上课。
- 等校车停稳后,在校车妈咪的引导下进行上下校车。依次上车,按指定座位就坐,并系好安全带,不得随意调换座位。
- 在乘车时始终安静的坐在座位上,不将手和头探出窗外,以免发生意外。如有暴力、恐吓、 欺负和大声喧闹等不良行为,校车妈咪及时劝阻后无效者,需由校车负责人联系班主任给予 该生1次放学后留堂通知。累计3次将取消学生1周乘坐校车的资格。
- 为了校车内环境的安全和卫生,请你不要在校车上进食,不乱吐痰或乱扔垃圾。
- 为了不影响整条校车的发车时间,若你无法乘坐校车,或因病提前离开学校,请务必提前通知校车妈咪和所属班级的班主任老师,以便清点人数。
- Arrive at the designated bus stop on time. Follow the bus mommy's arrangements. The bus will
  not wait more than 2 minutes after scheduled pickup time.
- If you are more than 2 minutes later in the morning, please ask your parent to take you to school.
   Get on and off the school bus under the guidance of the bus mommy. Fasten your seat belt imme-
- diately after taking a seat.
  - Sit quietly and don't put your hands or head out of the window. If you become loud, physical, or
- misbehave regardless of mommy's warning, the school will issue you 1 detention. If you get 3
  detentions, you will be prohibited from taking the school bus for 1 week.
  - Do not eat, spit, or litter on the school bus.
- If you plan not to take the bus on a specific day, please inform the bus mommy and your home-
- room teacher in time.

### 关于在校住宿 Dormitory Policy

- 按照生活部作息按时起床,按时熄灯。
- 用完早餐跟随生活班主任去操场,室内体育馆等散步晨练。每天带好当日作业按时参加晚自习,保持安静,独立做作业,离开晚自习教室需物归原位。

- 每天自己的内衣裤需要自己洗,按要求完成内务整理,保持床面,桌面,地面整洁。
- 在家庭房用晚点心,听英语节目,阅读,下棋等,离开时物归原位,保持家庭房整洁。
- 友好地与室友相处,尊重他人的生活习惯,尊重他人隐私。尊重听从生活班主任的管理和教导。
- 电子设备,零食和其他违禁物品一律不得带进生活部。
- Wake up and turn off the lights on time according to the daily schedule.
- Follow the dormitory teacher to the playground or indoor gym to do other morning exercises after breakfast.
- Attend the evening self-study on time, keep quiet, do homework independently, and return everything to the original place when leaving the self-study classroom.
- Wash underwear by yourself, tidy up your room as required, and keep the bed, table and floor clean
- Have evening snacks in the family room, listen to English programs, read, play chess, etc., and keep the room tidy and clean.
- Get along with roommates, and respect other people's living habits and privacy. Respect and follow up the management and instructions of the dormitory teachers.
- Do not bring electronic devices, snacks and other prohibited items into the dormitory.

亲爱的同学,请你注意自己的行为举止,因为这都代表着学校的声誉。宏文学校的形象大使必须具备"充满自信、以身作则、风度翩翩、知识渊博、谈吐儒雅"的素养,希望你积极争取成为形象大使,让老师们和家长们都为你感到自豪。

Dear students, please behave yourself, as every one of you represents the school. As Hongwen's image ambassador, you need to be confident, graceful, knowledgeable, and elegant and lead by example. We expect and will be proud to see that every student can become arimage ambassador of our school.

### > 学术诚信 Academic Honesty

- 你需要在作业中展现自己最好的水平,用实力收获赞誉。
- 将不是自己完全独立完成的作业归功于自己的行为被称为学术不端。
- 这包括了在进行学术写作时,将他人发布在网络或是书本上的观点运用到自己的论述中而不加标注;抄袭同学的作业;考试作弊等其他在学习过程中的一些不良行为。
- 宏文学校非常强调学术诚信问题。老师在日后的课程中也会和大家强调这一点。在九年级,你将会需要签署一份学术诚信保证书,表明你在日后的学习过程中会始终坚守学术诚信原则。
- 如果被发现有学术不端的行为,你的作业将不被得到认可。你有一次机会重新完成这项任务,除此以外,你需要承担一定的后果,例如学校会联系你的家长,你会收到留堂通知单以及可能会被取消内部和公开考试的资格。

- Completing your own work to the best of your ability is very important. You should receive the credit that your work and efforts have earned.
- Taking credit for work that is not your own or completed under fair conditions is Academic Dishonesty.
- This includes copying text or using ideas from the Internet or books without citing where it comes from, copying a friend's homework, cheating in a test or any other action that gives you an unfair advantage in your academic work.
- Academic Honesty is treated very seriously. You will be taught more about this in classes and Homeroom. In Grade 9, you will have to sign a form to say you agree to Academic Honesty.
- If you are caught committing Academic Dishonesty, you will not gain credit for your work. You
  will only have one opportunity to redo a task and after that consequences will apply including
  contacting parents, receiving detention and potentially being disqualified from internal and public
  examinations.

### > 禁止的事 Prohibitions

请务必记住在宏文的校园里……

- 不允许在校内咀嚼口香糖、教学区不允许吃自带零食。
- 不允许纹身、涂指甲油、染发、留奇异发型。
- 不允许抽烟、喝酒。
- 不允许在校内和校车上大声喧哗、使用不文明语言。
- 不允许在校内以及校车上打架或与他人发生肢体冲突。
- 不允许在校内以语言或行为欺负其他同学。
- 不允许携带手机等电子产品。
- 不允许携带潜在危险物品或非法物品进入学校。
- 不允许抄袭、作弊、欺骗以及一切不诚信行为。
- 不允许一切偷窃行为,未经别人允许,私自占有、使用他人物品都将被视为偷窃。
- 不允许浏览不适合学生的网站。
- 不允许在学校做危险的事情。

如果有学生被证实发生以上禁止的行为,校方将高度重视并通知其家长 / 监护人来校谈话。除此以外,学校还将对其采取停校车、停宿、停课或更严厉的教育措施。

Please remember that you are prohibited from doing any of the following things on campus:

- No chewing gum in school or eating snacks in teaching areas.
- No tattoos, nail polish, hair dyes, or strange hairstyles.
- No smoking on school premises.
- Do not make excessive noise or use bad language on campus and on school buses.
- Do not fight or have physical conflict with others on campus or on school buses.

- Do not bully weak or younger students verbally or physically on campus or on school buses.
- Do not carry electronic products such as mobile phones.
- Do not carry potentially dangerous or illegal items into school.
- Do not plagiarize or cheat.
- All means of theft are forbidden, and to hold and use other people's possessions without their permission is considered theft.
- No browsing inappropriate or irrelevant websites.

Do not do anything dangerous in school.

The school will take serious action in response to prohibited behaviors. The school will notify parents or guardians of anyone who disobeys school rules, and prohibit them from school buses, classes, and/or activities, or take further disciplinary action, if necessary.

### > 个人物品公约 Personal Belongings

- 尊重他人的个人物品,未经他人允许,不随意翻动他人物品。
- 原则上学校里不允许带贵重物品和现金,请每位学生保管好自己的个人物品,并在贵重物品上贴姓名标签。
- 保管好你的校园一卡通,不要借给他人使用。
- 失物招领在学校宿舍楼一楼值班室。如有遗失,请到学校失物招领处及时查找。
- Do not touch or use others' belongings without permission.
- Do not bring valuables or cash to school. Keep your personal belongings in a safe place and attach name tags to any valuables.
- Keep your campus smart card safe and do not lend it to others.
- Go to the school Lost and Found to find and claim any lost items.

### ▶ 问题处理指南 Troubleshooting Guide

如果遇到下列情况,我该怎么办......

What shall I do if...

● 如果我感到沮丧和难过…… I feel frustrated and sad...

找到前台老师跟她约一个时间与心理老师见面。你的父母也可以通过邮件联系她 (matianyi@hongwenfeh.com,心理活动室:教学楼 A311-312 室)。

- 1、找到你信任的老师,和他/她面对面聊一聊。
- 2、找你的好朋友聊一聊。
- 3、找你的父母聊一聊。

You can go to the Reception to make an appointment with the counselor. Your parents can also contact her by email. (e-mail:matianyi@hongwenfeh.com,Location:Room 311-312,Building A)

1. You can also find a teacher you trust and talk to him/her face-to-face.

2. Talk to your good friends.

3. Talk to your parents.

### ● 如果我看到有人行为不得当…… I see someone acting inappropriately...

告诉你的班主任或者学校其他老师和工作人员,他们会去处理相关问题的,学校会确保这是保密的。

Tell your homeroom teacher or other school teachers. They will deal with the issues and this will be confidential.

### ● 如果我丢失了校园一卡通…… I lose a campus smart card…

请到前台填写《宏文学校物品遗失补办申请表》补办一个。

备注:一卡通充值是在一学期开始前,一次性充值相应的费用,然后扣除每顿的相应餐费,因此你不需要再带现金来学校。学校除提供每日早、午、晚三顿正餐外,还提供每日三次点心。

Go to the reception to fill out the "Hongwen School Articles Lost Application Form" .

Notes: Students need to top up the smart card at the beginning of each semester, and they can have meals and snacks with these. Students do not need to bring cash with them to school.

### ● 如果我丢失了个人物品…… I lose a personal item…

请到学校"失物认领"处(宿舍楼一楼值班室),寻找并认领自己的丢失物品。

Go to the school Lost and Found area which is located at the Duty Room, 1st Floor, Building C, to find and claim your lost items.

### ● 如果我看到学校里的物品坏了…… I see something is broken in school…

后勤保障部门是我们学校的"大管家",你可以找到后勤保障部门的老师报修

(liyinnuo@hongwenfeh.com, 李音诺老师)。或者你也可以告诉班主任或前台老师。

The logistical support department is the "big steward" of our school. You can go to find the teachers there for repairmen (e-mail: liyinnuo@hongwenfeh.com). You can also tell your homeroom teacher or the reception teacher.

### ● 如果我突然感到身体不舒服了…… I am not feeling well…

找到位于教学楼一楼的 A106 医务室,告诉校医你的感受和需要。

找到任何一位你认识的老师,让他 / 她带你去医务室。校医会根据你的身体情况,和你的爸爸妈妈进行电话沟通。如果需要去医院或者回家休息,你的家长会到校来接你。

School clinic is on the first floor of the school building (A106). Go to school clinic or ask any teachers to take you there. Tell the school nurse how you feel and what you need. The nurse will call your parents

based on your physical condition. If you need to go to the hospital or go home for rest, your parents will come to school to pick you up.

### ● 如何补办和赔偿...... How to get lost school items reissued...

关于补办: 若发生《学生手册》、书籍、学生卡、家长卡等物品遗失问题,家长或学生可到前台填写《宏文学校物品遗失补办申请表》,由家长签字后交于前台,前台会给到相关员工来帮助学生处理补办事官。

关于赔偿:学校出具《宏文学校物品赔偿单》,由班主任联系家长来校与后勤负责人协商定损并签署确认单,后续与财务沟通支付事宜。

To get lost books, student card, parent card, other school issued items, go to the reception to complete the "Hongwen School Articles Lost Application Slip" or "Hongwen School Articles compensation Slip" . The reception will give the slips to the relevant staff to help the students to get the items reissued.

### > 对于学生的奖惩 Student Reward & Discipline System

### 关于激励 Reward System

学校对全面发展或在思想品德、学业成绩、身体锻炼及校园服务等方面表现突出的学生给予鼓励、表扬及奖励。

学校的激励采取公开鼓励、表扬; 颁发奖状、奖杯; 授予荣誉徽章、荣誉称号等形式。

我们鼓励孩子参加少先队队长竞选, 学生会代表竞选, 共青团员推优, 课代表选举, "每周之星"、"每月之星"、"形象大使"、"文明寝室长"、"宏文之星"、"优秀学子"、"显著进步学子"等颇具特色的学校荣誉称号选拔。努力争取每一次展现自我和团队的机会。

学校实行学院制积点卡奖励,学生通过德、智、体、美、劳等各方面的表现,均可从学校老师、工作人员处获得积点卡奖励,并计入其所在学院的总分。若学生在课堂、作业、校会等其他方面有不良表现,学校老师、工作人员亦可向学生发展中心提出扣除积点卡。每周校会时公布学院总分排名,月冠军学院及学期冠军学院将会获得不同程度的奖励。

班级实行每周积点卡奖励制,学生通过一周努力所获的积点卡数分别达到10 张、20 张、30 张、40 张,可根据班级规则享有不同程度的奖励。每月获得8 张及以上"最佳听众"卡,则可享有一次与校长共进下午茶的机会。

每月会从各年级选出一名学生作为每月之星代表,与校长共进下午茶。

学校会真实完整地将学生的奖励情况归入学校档案和本人档案。

HWS encourages and promotes students' all-round development and would like to praise and reward students who excel in virtue, academic performance, physical exercise, and campus services.

The school recognizes good student behavior by awarding certificates, trophies, honorary badges or honorary titles.

We encourage our students to campaign for Young Pioneers, Students' Representatives, Youth League, as well as competitions like "The Star of the Week", "The Star of the Month", "The Image Ambassador", "Best Dormitory Leader", "Star of Hong Wen", "Awards of Academic Improvement" and "Awards of Academic Excellence" and so on. All students are welcome to seize every opportunity to show them-

selves and their team.

The school implements the house system. Each house is awarded with merit cards from students' performance in terms of virtue, intelligence, sports, art, and campus services. Students can receive merit cards from their teachers and staff. However, if students misbehave in class, school assembly or other activities, or miss homework, school teachers and staff can also deduct their merit cards via SDC (Student Development Center). Monthly house competitions and semester house competitions will be held.

Every class implements a weekly reward system. Students can receive 10, 20, 30 or 40 merit cards each week. They can earn different levels of rewards according to class rules. If a student earns 8 or more "Best Audience" cards in one month, he/she may have the opportunity to have afternoon tea with the principal.

Every month, the star of month from each grade will be selected as the representative to have afternoon tea with

the principal.

HWS keeps track of students' performance and will maintain a record of their awards in the school files and their personal files.



### 上海浦东新区民办宏文学校违纪违规惩戒分级

序号	处分等级	类型	处分适用	惩戒教育	适用范围
1	级	谈话教育	不完成教学任务、不服从教育、 管理的;(迟到、不按时交作 业、不按要求穿着校服、染发 等)	1、口头批评; 2、责令赔礼道歉、做口头或者书面检 讨;	小学 初中 高中
2	II级	课堂教育	扰乱课堂秩序、学校教育教学秩序的; (上课打闹、吃零食,顶撞老师、浏览不适宜网站等)	1、适当增加额外的教学或者班级公益 服务任务; 2、一节课堂教学时间内的教室内站 立; 3、取消一次午休	小学 初中 高中
3	III级	留堂教育	违反学校规定,(不按要求使用 电子产品、超过三次不交作业, 故意破坏学校公物,书面检查超 过3次以上);	1、取消三次午休或者暂停一次ECA课程; 2、周五放学后留校教导反思Detention一次; 3、约谈家长	小学 初中 高中
4	IV级	警告	吸烟、饮酒,或者言行不当,违 反学生守则的;	1、由学校德育工作负责人予以训导; 2、承担校内公益服务任务; 3、心理辅导介入一次; 4、给与不超过3天的停课或者停学,要求家长在家进行教育、学生写书面反思;	小学 初中 高中
5	V级	严重警告	打骂同学、实施有害自己或者他 人身心健康或者侵害他人合法权 益的;	1、安排接受专门的校规校纪、行为规则教育; 2、暂停或者限制学生参加游览、校外集体活动以及其他外出集体活动; 3、给与不超过一周的停课或者停学,要求家长在家进行教育、管教; 4、持续心理辅导关注,建议转介;	小学 初中 高中
6	VI级	记过	辱骂教职员工、校园霸凌或者侵害他人合法权益的,情节严重者;	1、持续心理咨询,行为干预; 2、给与不超过两周的停课或者停学,要 求家长在家进行教育、管教; 3、停课后返校,请监护人或相关专业 教师入校陪读;	小学 初中 高中
7	VII级	留校察看建议转学	已经获得记过处分,再次违反校 级校规的,情节严重的;	1、由校领导(含法治副校长)或者法 治辅导员予以训诫; 2、持续心理辅导,行为干预; 3、家校签署留校察看约定; 4、任课老师及相关老师按照与留校察 看约定评估学生在校行为并打分; 5、无法达成留校察看约定建议转学;	小年(以初高用学级)、、适
8	VIII级	开除学籍	已经获得留校察看处分,再次违 反校级校规的,情节非常严重 的;	对高中阶段学生,违规违纪情节严重, 或者经多次教育惩戒仍不改正的学生, 给予开除学籍的纪律处分。	高中适用

- 1. 以上惩戒分级适用于全体在校生,包含校车、住宿、食堂等学生生活学习场所,以及学校组织的各类校内外活动场所;
- 2. 学生处分满1年的,表现良好,可由本人提出申请,经班主任、年级组长、学发中心、校长室评估后,予以撤销。
- 3. 以上条款有未尽事宜,参照以上相关条例,进行惩戒或处分,最终解释权归学生发展中心。

### Punishment Classification for Violation of Discipline and Regulations

No.	Level	Classification	Punishment Conditions	Disciplinary Education	Availability
1	I	Face to Face Education	Fail to complete teaching tasks and disobeying disciplinary regulations or management(being late, failing to hand in work on time, not wearing school uniforms under general rules, hair dyeing, etc).	Oral warning;     Z.Apologize formally, or make an oral or written self-criticism review.	Primary, junior and high school
2	II	In-Class Education	Disturbing the classroom order and school education and teaching order; (make noise in classs, eating snacks, contradicting teachers, browsing inappropriate website, etc).	1.Appropriate additional teaching or class public service tasks;     2.Standing in the classroom during a class teaching period;     3.Cancel lunch break once.	Primary, junior and high school
3	III	Detention	Violation of school regulations(failing to use electronic products as required, failing to hand in homework for more than three times, deliberately destroying public property of the school, conducting criticism review for more than three times).	1.Cancel three lunch breaks or suspend one ECA course; 2.Friday detention; 3.Parents meeting.	Primary, junior and high school
4	IV	Warning	Smoking, drinking, or improper words and deeds, in violation of the students code;	1.Disciplinary education by teachers in charge of moral education;     2.Offer to take public service in campus;     3.Intervention by psychological counselor once;     4.Give no more than 3 days of suspension, parents are required to conduct education at home. A hand writing self-criticism review is required.	Primary, junior and high school
5	V	Serious Warning	Bullying classmates, hurting other students or oneself physically or mentally and infringing on the rights and interests of others.	1.Arrange to receive special education on school rules and regulations and rules of conduct; 2.Visiting and attending extracurricular activities are suspended or restricted; 3.Give no more than a week of suspension, parents are required to conduct education at home; 4.Continuous psychological counseling and referral are recommended;	Primary, junior and high school
6	VI	Demerit	Abusing faculty member, bullying in campus or infringing on the legitimate rights and interests of others, or make any serious mistakes.	1.Continuous psychological consultation and behavior intervention;;     2.Give no more than two weeks of suspension, parents are required to conduct education at home;;     3.Legal guardians or specialized teachers should accompany students when they are granted re-entry to school after suspension.	Primary, junior and high school
7	VII	Academic Probation/ Optional Transfer	Violating school regulations while under demerit conditions.	1.Admonished by principals/the vice-principal of law or the counselor; 2.Continuous psychological counseling and behavior intervention; 3.Agreement of academic probation signed by school and parents; 4. Evaluation by teachers; 5.Students who cannot fulfill the probation will be strongly recommended of transferring to another school.	Above G3, junior and high school
8	VIII	Expulsion	Violating school regulations again under academic probation.	Students in senior high schools who violates rules and discipline seriously or fail to correct after repeated education and punishment shall be expelled from school.	High School

<sup>1.</sup> The above punishment classification is applicable to all students, including school bus, accommodation, canteen and other places for students' living and learning, as well as all kinds of activities inside and outside the school organized by the school;

<sup>2.</sup>If student was under punishment more than one year and behaved well during the period, application for cancellation of punishment is available and will be evaluated among homeroom teachers, head of grade, head of student development center and the principal meeting;

<sup>3.</sup> If there are any matters not covered in the above provisions, they shall be punished according to the above relevant regulations, and the final interpretation right shall be vested in the student development center.

### 关于学生不当行为事件的处理 Disciplinary Action on Misconduct

### 放学后留堂 / 校园服务

After School Detention/School Service

学生由于(住宿、校车、校服、课堂纪律、作业等)行规问题,收到相关老师给予该生的《留堂通知单》。

Due to any misbehavior problems including dormitory, school bus, uniform, classroom behavior, or homework, students will receive the detention notice from related teachers

学生发展中心将每周 三前收到的留堂通知 单学生名单汇总,并 于周四邮件和纸质发 送给家长《留堂通知 单》。

Student Development Center will summarize the detention student list by every Wed, and send the hard and soft copy to related parents. 留堂学生于周五下午 14:55-16:00 在 图 书 馆藏书阁进行,并停 止当日该时段一切学 校活动,如课外活动、 校队、校车服务等。 家长需 16:00 来校接 学生。

Detention session is in Library (1st floor) from 14:55 to 16:00 every Friday. Students are not allowed to attend any activities, such as ECA or school bus service. Parents need to pick up students at 16:00.

时间 / Time	地点 / Location	留堂看护人 Detention Supervision
周五 Friday (14:55-16:00)	一楼图书馆藏书阁 Library, 1 <sup>st</sup> Floor	年级组长 Head of Grade 学生发展中心工作人员 SDC

每学期收到 3 张留堂通知单后,学校将会发放给你 1 张校园服务通知单,并安排你完成相应的校园服务。

If the student receives three detention notice forms in one semester, the school will send one school service notice form, and arrange you to complete designated school service.

### >> 关于高中生(九至十一年级)电子产品携带及使用管理的规定 Regulations on the Carrying and Use of Electronic Products for High School Students (G9-G11)

根据教育部办公厅印发的《教育部办公厅关于加强中小学生手机管理工作的通知》(教基厅函 [2021] 3 号)、上海市教育委员会《关于加强中小学生手机管理工作的通知》的要求,维护学校的 教学秩序,为所有学生营造良好的学生和生活环境,促进他们的身心健康,对高中学生电子产品 的携带和使用制订以下规定:

According to the requirements of the notice of the General Office of the Ministry of Education on strengthening the mobile phone management of primary and secondary school students, and the notice of Shanghai Municipal Commission of Education on strengthening the mobile phone management of primary and secondary school students, and in efforts to maintain the order of the school, create a good living environment for all students, and promote their physical and mental health, the following regulations are formulated for the use of electronic devices for high school students:

### 1. 携带规定 Rules for carrying electronic products

- 1.1 允许所有学生携带个人电脑和手机入校。住宿生返校当天(通常是周日)必须在 10 点以前将手机交给宿管老师管理,电脑当日晚由学生自行保管。走读生每天入校之后必须在 8点前把手机放入教室门外的手机保管柜并锁上门,钥匙自行管理,并于放学前取回。All students are allowed to bring personal computers and mobile phones to school. Boarding students must hand in their mobile phones to the dormitory supervisor before 10 pm on the day they return to campus (usually Sunday) and keep the computers themselves. Day students must secure their mobile phones in the storage box outside the classroom, lock the door, and keep the key. They can pick up their mobile phones at the end of school every day.
- 1.2 禁止所有学生携带游戏机等与学习无关的各类电子产品入校。All students are prohibited from carrying electronic devices that have nothing to do with study, such as game consoles, into school.
- 1.3 需要携带个人电脑和手机的学生需在学期初经家长签字确认并登记。Students who need to carry personal computers and mobile phones should sign and register with their parents at the beginning of the semester.

### 2. 使用规定 Rules for use of electronic devices

2.1 每个学生只允许携带一台个人电脑和一部手机入校,电脑和手机均需做好标识

Each student is only allowed to carry one personal computer and one mobile phone to school, both of which needs to be labeled with their names.

2.2 所有学生白天允许携带个人电脑进教室,但必须在任课老师的指导下使用。

All students are allowed to carry personal computers into the classroom during the day, but they must only use them under the guidance of their subject teachers.

2.3 所有学生允许在晚自习时用电脑,但必须用来完成作业及学习。

All students are allowed to use computers during evening study, but they must only use them for homework and study.

2.4 除了返校当晚以外,个人电脑不允许带到宿舍区,晚自习结束后学生必须把个人电脑放入 书包柜。

With the exception of the night of returning to school, personal computers are not allowed in the dormitory area. Students must put their personal computers in the locker after the evening study.

2.4 所有住宿生在每晚的 9:10 到宿管老师处取出手机使用,并于 9:40 前交还给宿管老师。

All boarding students can collect their mobile phones from the dormitory supervisor at 9:10 pm and return them before 9:40 pm.

2.5 学生不允许代他人领取或归还手机,因代为领取或归还造成的一切后果有学生自行负责。

Students are not allowed to collect or return the mobile phones on behalf of others. Students are responsible for all the consequences caused by such collection or return.

#### 3. 奖励 Rewards

严格遵守学校电子产品携带和使用规定的学生将获得绩点卡,为其所在学院的积分做出贡献。 Students who strictly follow the rules on the carrying and use of electronic devices will receive merit cards which will contribute to their house.

### 4. 违规后果 Consequences

4.1 第一次违规:如果学生在非住宿区被发现持有手机或者在课堂内外使用个人电脑做与学习无关的事,任何员工都有权直接没收手机或电脑,并交给高中部分管学生行为的老师管理,24小时后方可归还。

First offence: If a student is caught with a mobile phone in a non-residential area or using a personal computer in or out of class for non-academic purposes, any staff member has the right to confiscate the mobile phone or computer and turn it over to the high school teacher who is in charge of student behavior for 24 hours before returning it.

4.2 第二次违规:如果学生在非住宿区被发现持有手机或者在课堂内外使用个人电脑做与学习无关的事,任何员工都有权直接没收手机或电脑,并交给高中部分管学生行为的老师管理,一周后方可归还。班主任应和学生谈话,重申严格遵守学校电子产品管理制度的重要性。如果中间遇到周末,学生可以在周五离校前申请取回,并在下周一主动上交,继续接受违规后果。如果走读生第二次违规,班主任将通知家长在以后的 5 天中不允许学生携带手机或个人电脑入校。如果任课老师需要学生使用电脑完成学习任务,班主任将协助安排学生使用学校电脑。

Second offence: If a student is caught with a mobile phone in a non-residential area or using a personal computer in or out of class for non-academic purposes, any staff member has the right to confiscate the mobile phone or computer and hand it over to the high school teacher in charge of student behavior for one week before returning it. The homeroom teacher should talk to the students and emphasize the importance of strictly following the school's electronic product management policy. If there is a weekend in between, students are allowed to get the phone back before leaving school on Friday and submit it to the teacher voluntarily the following Monday. If a day student breaks the rule for the second time, the homeroom teacher will inform the parents that they will not be allowed to carry mobile phones or personal computers to school for the next 5 days.



If their subject teacher needs the student to use the computer to complete homework or classwork, the homeroom teacher will help arrange the student to use the school computer.

4.3 第三次违规: 班主任和年级组长会通知家长来学校面谈,学生还将受到一次留堂处分以及 取消每学期末各项评优资格,并在以后的一个月中不允许学生在学校使用手机或个人电脑,周 末按 4.2 处理。如果任课老师需要学生使用电脑完成学习任务,班主任将协助安排学生使用学 校电脑。

Third offence: the homeroom teacher and the grade head will inform the parents to come to the school for an interview. Students will also be punished with one detention and lose the right to be nominated for awards at the end of each semester. Students will not be allowed to use mobile phones or personal computers in the school for one month. Weekends will be treated as 4.2. If their subject teacher needs the student to use the computer to complete homework or classwork, the homeroom teacher will help arrange the student to use the school computer.

4.4 第四次及以上违规:除了班主任和年级组长会通知家长来学校面谈,并在以后的两个月中不允许在学校使用手机或个人电脑以外,学生还将受到两次留堂处分以及取消每学期末各项评优资格,周末按4.2 处理。

Fourth or more offence: In addition to the homeroom teacher and grade head informing their parents to come to school for an interview and not allowing the use of mobile phones or personal computers in school for the next two months, the student will also be punished with two detentions and lose the right to be nominated for awards at the end of each semester. Weekends will be treated as 4.2.



### >> 国际高中管理条例 International High School Management

### 融合教育 Inclusive Education

高中的学习生活极富挑战性,可能时常会让你感到有压力。但很多时候,其实失败的真正原因不是因为困难太大,而是你把困难看得太重。当你遇到这种情况时,你可以选择和自己信任的对象进行交流,从而化解自己的焦虑和困惑。

High School learning can be challenging and stressful at times. Even so, many worries and concerns that students have seem bigger than they really are and can be reduced by talking them through with someone you feel comfortable with.

交流的对象可以是你信任的朋友、你的班主任老师、高中部的正副校长、学生发展中心的老师、你的任何一门学科老师或是宿管老师等。

This could be a trusted friend, your homeroom teacher, the High School Assistant Principal or High School Principal, the Student Development Centre staff, a subject teacher or a dorm teacher.

同时我们也拥有专业的心理老师作为融合教育协调员,当你遇到困惑时,也可以向他倾诉或是寻求帮助。在所有的高中教室中,我们会张贴有相应信息。当你有任何需要时,可以根据指引约见心理老师。

We also have an Inclusive Education Coordinator who is a trained psychologist who is available for you to meet and discuss any concerns or challenges you might be facing. In all High School homeroom classrooms, we will put up information about how you can arrange to meet school psychologist if you wish.

尽管朋友能给你提供莫大的支持和鼓励,但是我们还是要建议你谨慎选择想要分享个人隐私的对象,考虑到其可能带来的潜在后果。

Although friends are often a great source of support and kindness, we advise you to consider carefully about who you share personal details with and the potential impact this could have and risks you could put yourself in.

宏文学校全体教职员工都非常乐意助力你的个人发展。我们希望你在这儿学习顺利,生活愉快。我们也非常关心您所面临的任何学习或是生活上的问题。只要有需要,我们将全力为你提供支持。

You are reminded that all Hongwen School staff are here to support you in your personal development. We want you to be successful in your learning and happy in life. We care about any issues you are facing that affect your wellbeing or academics in anyway. Where possible we will do what we can to reduce pressure and offer you support.

### 升学准备 University Counselling

从十年级开始,为了让学生在追求升学与职业生涯规划的过程中获得充分的信息,学校会为学生会 配备相应的升学指导老师。

We have a University Guidance Counsellor who will work closely with students from Grade 10.

升学指导将在以下方面给予你帮助 Our Counsellor will help you to:

- 审视自己的优势,兴趣和目标所在 reflect on your strengths, interests and goals
- 增强你对于未来多种可能性的认识与理解 increase your awareness of the options available for your future
- 指引你做出最优的选择
   guide you to make informed choices about what is best for your future
- 帮助你最大化激发自己的潜能,在未来选择的道路上成为一名强有力的竞争者
   advise you on how to maximize your potential and be a strong candidate for your chosen pathway after Hongwen

### 高中奖励制度 / High School Rewards and Acknowledgement

你们现在所进行的学习,都是在为以后参加一些广泛认可的考试打下基础。因此,为了在今后考试中取得优异的成绩,我们希望你能在现阶段的学习过程中积极应对一切学术和个人挑战,力争展现出最好的自己。与低年级一样,优异的表现和行为将被授予积点,这将助力自己的学院取得佳绩。

You are studying or preparing to study for highly respected examinations. We hope you will rise to the academic and personal challenges open to you and aim to be the best version of yourself. As in lower grades, merits will be awarded for good work and behaviour, which will contribute towards a house total.

为了在学习过程中激发你们的动力,我们将会请学科教师提名学科优秀奖,请班主任老师提名班级优秀奖,以嘉奖在学习过程中拥有突出表现或是进步的同学。

To further support you in this process, we will award subject and homeroom commendations to students who are showing strong effort in a particular subject or excellent personal development. These will be nominated by subject teachers and the homeroom teacher.

#### 学科优秀提名将参考以下四个方面

Subject commendations may be awarded for one of four reasons:

- 坚持不懈的努力 Consistently excellent effort
- 积极投身于课堂
   Active and positive class participation
- 创造超出预期的结果Exceeding expectations on a task
- 取得显著的进步
   Making significant progress

### 班级优秀提名将参考以下四个方面

Homeroom commendations may be awarded for one of four reasons:

- 现出 IB 学习者的素养
   Showing elements of the IB Learner Profile
- Assisting teachers or classmates

● 积极协助老师或是同学

在校会、升旗仪式或是其他集体活动中有突出贡献

Excellent contribution to Assembly, Flag Raising or other activities

● 在集体中展现出领导力

Demonstrating Leadership skills

被评为学科优秀或是班级优秀将可以为你的学院赢得五个积分。

Subject and homeroom commendations carry five merits for your house.

获得奖项最多的同学将有资格被授予每月之星或是学期末的宏文之星奖项。

Students achieving the most commendations (either subject or homeroom) will be eligible for Star of the Month Awards and end of semester awards.

### 高中惩戒制度 High School Behaviour Consequences

对于一些轻微的行为问题,我们将采取扣除积点的惩罚措施。第一次,老师将给予你口头警告并有一次机会改正自己的行为。如若同一位老师反复提醒你仍然没有改正,积点将会从你的学院总数中进行扣除。

Minus merits will be issued for minor behavior problems. This will result in a merit being deducted from your house total. For these minor issues we will give you a warning and a chance to modify your behavior but for repeated issues from the same teacher/class a minus merit will be issued.

以下行为会导致积点的扣除 / Examples of behaviour warranting a minus merit:

- 上课迟到 / Lateness to class
- 作业迟交 / 作业未完成 / Late/incomplete homework
- 在一次警告后仍然开小差 / Off task after initial warning
- 干扰课堂 / Disrupting class (e.g talking during instruction)
- 未经允许乘坐电梯 / Using elevator without permission
- 未经允许使用笔记本电脑 / Using laptop without permission

对于更加严重的行为问题或是在校一周五天三次被扣除积点,你将需要在点心时间和高中副校长一起完成三十分钟的留堂,反思自己的行为。

For more serious behavior concerns or if you receive three minus merits in five consecutive school days, you will be required to complete a 30 minute detention with the High School Assistant Principal, during break times.

如有以下行为,需要在休息时间进行留堂

Examples of behavior warranting a 30 minute break time detention:

- 在被扣除一次积点后仍然存有不良行为 / Continued bad behavior after a minus merit is given
- 未经允许使用手机 / Using phone without permission
- 校车上存在不良行为(第一次)/Bus behavior concern (first offence)
- 旷课 (包括 ECA 课程 )(第一次)/ Skipping class or ECA (first offence)

对于反复提醒仍不改正或是严重的不良行为,或者是在半学期以内收到了三次点心时间的留堂处分,你将需要完成学校的一小时留堂处分。在每周五的下午放学后,你将需要和其他年级的同学一起在图书馆进行留堂反思,并将通知你的父母。这会影响到你这学期的评优评奖,或是需要你承担其他相应的后果。

For repeated or significant behavior problems, or if you receive three break time detentions in half a semester, you will be placed in a one hour School Detention. This will take place on Friday afternoon after the school day in the library with students from other grades. This is considered a serious consequence. Parents will be informed and it will affect your chances to win awards or take positions of responsibility for one semester.

以下行为将会需要在周五放学后进行留堂 /

Examples of behavior warranting a Friday afternoon school detention:

- 在之前已经有过一次午餐时间的留堂处分后仍然没有改正自己的不良行为
   Repeatedly bad behavior in class after the teacher has given a lunch detention on a previous occasion
- 对于学校中的任何人存在出言不逊或是伤害他人的行为
   Deliberately speaking disrespectfully or hurting any member of the Hongwen community
- 校车上存在不良行为(第二次及以上)/ Bus behavior concern (repeated offence)
- 旷课(第二次及以上) / Skipping class (repeated offence)
   考试作弊 / Cheating in a test



### >> 其他家长或监护人须知 Additional Parent or Guardian's Guide

### > 班级微信群管理 Class/WeChat group management

根据市教委要求,为更好地利用现代化网络信息技术,促进老师与学生、家长共同成长,共同进步,共创文明和谐校园,现就加强学校班级微信群管理工作通知如下:

According to the requirements of the Education Commission, in order to make better use of modern network information technology, to promote collaboration across teachers, students, and parents, and to create a civilized and harmonious campus, it is hereby notified to strengthen the management of WeChat group in the class as follows:

### 一、建群宗旨 Purpose of the Wechat Group

- 1、严格遵守国家法律法规及相关网络信息管理规定。
- 2、班级微信群仅用于学校发布通知、家校信息沟通交流,不得发布与家校联系无关的消息、言论。不做聊天使用。
- 3、禁止出现诋毁学校及师生形象,有违社会公德、不文明、侮辱性语言,以及带有不良政治倾向、宗教色彩的内容。
- 1. Strictly abide by national laws, regulations, and relevant network information management regulations.
- 2.WeChat group of the class is only used for school announcements and home-school information communication, and it is not allowed for the release of news or remarks unrelated to home-school information. Chatting is not allowed.
- 3.It is forbidden to discredit the image of the school, teachers and students, post violate social ethics, use uncivilized and insulting language, or contain improper political tendency and religious content.

### 二、入群范围 Members of the Wechat Group

- 1、仅限学生的父母双方入群,禁止无关人员加入。各班志愿者有权讲行调整与梳理。
- 2、群成员一律实名制,命名规则: 学生姓名+爸爸/妈妈。
- 1. Only the parents of students are allowed to join the group, and irrelevant people are not allowed to join. Volunteers of each class have the right to adjust and sort out the members.
- 2.All members of the group shall set real name: student name + father/mother.

### 三、使用公约 Convention of Usage

- 1、对群管理者要求 Requirements for group managers
- 班级微信群由家长志愿者作为群管理,准确传达家校信息,负责群成员实名制、聊天监管、违规 提醒处理等。
- 不定时检查群成员,不应加入人员应予以清退(只限于学生的父母双方,其余入群者应予以清退)。

- 管理者可在群内发布有关学校或班级教育教学活动、家庭教育指导的内容以及与教育教学活动有关教育信息等,相关信息应符合教育教学的相关政策规定。
- 在群内不得发布任何恶意攻击学校、老师、学生或家长的信息。
- 不得就个别学生的问题在群内进行讨论,探讨个别学生的具体教育问题可与其家长直接电话或而谈沟通协商。
- 不得与其他家长发生争执,当家长在群内出现负面情绪时,应当引导家长通过其它途径解决。
- WeChat group of the class is managed by parent volunteers as a group, which accurately conveys home-school information, and is responsible for real-name system of group members, supervising chatting, and handling violation reminders;
- Check group members from time to time, and those who do not join the group should be cleared out (the group is only for students' parents);
- The manager can post the information of school or class education and teaching activities, family
  education guidance and education information related to education and teaching activities within
  the group, and the relevant information should comply with the relevant policies and regulations
  of education and teaching;
- Do not post any malicious information against the school, teachers, students, or parents within the group;
- Do not discuss individual student's problems in a group. Please discuss individual students' specific educational problems by telephone or face-to-face with their parents;
- Do not argue with other parents. When parents have negative emotions in the group, parents should be guided to solve the conflict through other ways.

#### 2、对家长的要求 Requirements for parents

- 家长对学校、老师的意见和建议不要在群内发布,如有需要应直接邮件联系班主任及学校管理 人员,或通过邮件预约相关老师面谈;
- 不得发布带有煽动性、过激性的言论;
- 不在群内发布广告、推销商品或与本群无关的信息:
- 不得擅自邀请非本班级家长进群;
- 因老师上课或工作繁忙不能及时回复家长志愿者发布的信息家长可另致电老师,以便提供及时回复,确认信息。
- Parents' opinions and suggestions on schools and teachers should not be published in the group. If
  necessary, parents should contact the head ail, or make an appointment for an interview with rele-
- vant teachers by email;
- Do not post inflammatory or extreme statements;
- Do not post advertisements, or information unrelated to the group;
- Do not invite any parents whose children do not study in the class into the group without permission:
- As the teacher is in class or busy with work, parents can call the teacher for timely reply and confirmation

### 四、学校监管 School supervision

- 1、学校家委会要做好对家长正确使用班级微信群的宣传,起到正确的引导作用。
- 2、学校一旦发现微信群有恶意攻击学校、老师、学生或家长的情况,可将相关人员清除出群,并依法依规作出进一步处置;当出现倾向性、危害性问题,可能造成一定影响时,学校会及时上报教育局。
- 3、志愿者可与老师及时沟通群里动态,以便更积极主动的了解情况和解决问题。
- 1.The Parents Committee needs to promote how to operate class WeChat group of parents appropriately.
- 2.Once the school finds that WeChat group has maliciously attacked the school, teachers, students, or parents, it can clear relevant personnel out of the group and further dispose according to laws and regulations; if the problems may cause certain negative effects, the school will report to the Education Bureau in time.
- 3. Volunteers can communicate with teachers about the dynamics of the group in time, so as to understand the situation and solve problems more actively.

### > 对家长及监护人的期望 Expectations for Parents or Guardians

- 尊重学校的专业意见、决定以及相关规定。
- 学校提倡尊师爱生,不对学校老师和教职员工评头论足。
- 及时将学生的校内外获奖信息填入校宝系统。
- 准时出席每学期的家长会和家长接待日活动。
- 培养与时俱进的家庭教育观念、使用科学的家庭教育方法来引导孩子,保持开放的心态看待孩子的成长。
- 积极加入家长志愿者队伍,配合学校开展各类教育相关活动。
- 您可以通过家委会或学校途径来表达您对教职员工的谢意和意见。
- Keep an open mind regarding the growth of children.
- Communicate positively in the school WeChat group. No advertisements in the school community.
- Respect decisions and regulations of the school.
- Respect teachers. No judgments on school teachers and faculty.
- Upload student's awards information to Hongwen school system in time.
- Attend school PTA and Parental Reception Day on time.
- Adopt modern approaches and scientific methods to raise and treat children, and develop parenting skills with the times.
- Actively participate in parental volunteer activities, and cooperate with school to carry out related activities.
- Gratitude to teachers can be expressed via Parents Council or other formal ways.

### > 家校沟通渠道 Communication between School and Families

家长可根据事情的大小级别用下列方式进行家校沟通:

- 1、与家长志愿者或家委会成员联系。
- 2、在学生手册上留言。
- 3、通过邮件向相关老师,教职员工咨询或预约面对面沟通。
- 4、参加每学期的全体家长会。
- 5、每学期的一对一家长见面会。
- 6、通过班主任、年级组长、教研组长、学校事务联系人预约面谈。

Parents can communicate with school in the following ways depending on the importance of the matter.

- 1. Contact the class parent volunteers or members of the family committee.
- 2. Write down the message in the Student Planner.
- 3.Email the relevant teachers or faculty members for consultation or make appointments for face-to-face communication.
- 4.Parent conferences every semester.
- 5.One-on-one parent meeting every semester.
- 6.Make an appointment with the homeroom teacher, the head of grade, the head of subject or school affair contacts.

### > 关于学业成绩报告单 About Academic Report Cards

宏文学校一年发放四次成绩单,也就是说一个学期发放两次成绩单。一次在期中考试后,一次 在期末考试成绩后。

- 期中考试后的成绩单上只有期中考试成绩以及任课教师给与的阶段性总评分;期末考试之后除了期末成绩、期末总评分,还有任课老师的评语。
- 宏文学校的成绩是采用等第制的,即从高到低依次为 A\*/A/B/C/D/E/F,学校根据每个学科特点和年级特征设定相应的分值等第。
- 查阅方式:关注"宏文学校上海浦东校区"微信公众号→点击菜单"校园生活"→"家长"。
  - Hongwen School issues two report cards per semester, four per school year. The first report is issued after the midterm exam and the second one after the final exam each semester.
- Each semester, the first report card will only show the midterm exam scores and interim grades
  given by subject teachers. The second report card will include the final exam scores, the cumulative grades given by subject teachers, and comments from subject teachers.
- Hongwen School uses a letter-based grading system, with available grades A\*/A/B/C/D/E/F from high to low. The school sets the grading standards based on characteristics of each subject and grade level.
- The way of Online report reading: Hongwen Wechat →click "Campus Life"→click"Parent Login".

### > 关于月度教学计划 About Monthly Teaching Plans

每个月的月初,家长都会通过邮件收到学校各个年级各个学科汇总的教学计划进度表,便于学生提前预习,便干家长对孩子的及时辅导,也便干病事假的学生能够课后补习有依据。

At the beginning of each month, parents will receive the pacing calendar based on teaching plans provided by every subject in each grade by mail, which is convenient for students to preview the required materials in advance and for parents to provide the necessary support. It is also convenient for students to use this information to get help for missing work if they are absent from school.

### > 关于作业的布置 About Homework Assignments

宏文学校主张学生自主学习,本着对学生自我负责态度的培养,也本着对学生好习惯的培养,我们不把任何作业通过邮件或电子平台的形式发布于家长群里。

学生应:

- 理解作业要求。
- 在规定的时间内完成作业。

Hongwen School expects all students to learn independently. In order to train our students to become more responsible individuals, we do not post any assignments to the parents electronically or send them by mail.

Student should:

- Understand the homework requirements.
- Complete their homework within the specified time.





### > 访客进出学校规定 Visitors' Policies

校外人员包含家长,进入校园首先必须在门卫处登记,并出示相关证件/文件。

选择 1、出示有效身份证件(身份证或驾驶证)或家长卡。

选择 2、出示相关预约凭证。

选择3、由保安致电相关老师或工作人员确认身份。

然后佩戴访客证入校。已预约的参观人员必须在老师和学校工作人员的陪同下参观学校,不能擅自 进入校园。

家长完成与老师或校领导的约谈后、参加完学校各类活动或办理完各类手续后,请勿在校内长时间 逗留、尽快离校。

放学后,学生若发现有物品遗漏,G1-G2 学生由家长陪同回班寻找,若 20 分钟内不出来,则由保安进校带出。其他年级学生则独自回班寻找,家长在校外等候学生。

Visitors, including parents, must sign in at the school entrance before entering the school. They need to bring appropriate ID or documents:

Option 1: Show a valid identification (ID or driver's license) or parent card.

Option 2: Show the appointment information.

Option 3: The Guard calls the relevant teacher or staff to confirm the visit.

Visitors must wear "guest card" and be accompanied by a teacher or school staff member. Parents cannot enter the school by themselves.

Visitors are not allowed to stay in the school for long periods of time after meeting teachers, participating in activities, or completing school affairs, etc.

Students from G1-G2 are allowed to go back to look for their omitted belongings with parents within 20 minutes or the security will go to involve. Other students can only go back to look for their omitted belongings by themselves while parents could only wait outside the school.



### > 国际高中课程介绍 Introduction to International High School Curriculum

宏文学校上海浦东校区的高中课程涵盖了两年的IGCSE,两年的A-Level/两年的IBDP。高中课程成绩是特别重要的,因为在申请大学时需提交IGCSE+A-Level/IGCSE+IBDP的成绩单。一般来说,在申请大学时学生的学术能力是在整体能力里占比是较重的,所以在前期选择课程时,建议选择自己擅长而又感兴趣的科目。有部分专业是有选课要求的,比如说大部分的医学相关本科课程就需要学生在高中阶段有修读生物以及化学,工程类本科课程则需要学生在高中阶段有数学与物理的正式课程。

The high school curriculum of Shanghai Hongwen School covers two years of IGCSE, two years of A-Level or two years of IBDP. High school achievement is particularly important, because you need to submit IGCSE + A-level / IGCSE + IBDP transcripts when applying for University. Generally speaking, when applying for University, students' academic ability is critical in the overall assessment process. Therefore, when choosing courses in the early stage, it is recommended to choose the subjects that you are good at and interested in. Some majors have course selection requirements. For example, most medical related undergraduate courses require students to study biology and chemistry in high school, while engineering undergraduate courses require students to have formal courses of mathematics and physics in high school.

### > IGCSE – International General Certification of Secondary Education (CAIE)

IGCSE课程是面向14到16岁青少年的全球最受欢迎的国际资格证书课程,是由GCSE英国普通中等教育证书课程作为原型专为国际学生设计的初中水平课程,同时是A-Level课程的基础,预备课程涵盖的学科领域广泛,在IGCSE阶段剑桥国际考评部(CAIE)开设70多门科目,学校可以鼓励学生了解不同科目,并在这些科目之间建立联系,灵活组合选择就读科目。IGCSE证书在世界范围内获得广泛认可。剑桥IGCSE课程也是国际学校广泛使用的A-Level课程和IBDP课程的通用预备课程。

IGCSE is the world's most popular international qualification course for young people aged 14 to 16. It is a junior high school level course designed for international students with GCSE British certificate of general secondary education as the prototype. It is also the basis of A-Level course. The preparatory course covers a wide range of subjects. In the IGCSE stage, more than 70 subjects are available from CAIE, Schools can encourage students to discover different subjects, and establish links between these subjects. IGCSE certificate is widely recognized in the world. Cambridge IGCSE course is also used widely in international schools as a general preparatory course for A-Level and IBDP.

目前,本校开设的IGCSE课程体系中,提供了英语第一语言、英语第二语言、数学、附加数学、综合科学(物理、化学、生物)、艺术与设计、计算机科学、全球视野、戏剧、经济、商科、中文、音乐、体育理论等课程。一般学生在IG阶段选择6-8门左右的课程进行学习适应国际教学的节奏。学生的考试成绩及其所选修的A-Level/IBDP课程在很大成都上决定着是否能进入理想的大学和学习所选择的学位课程。

At present, the IGCSE curriculum system of our school provides English First Language, English Second Language, Mathematics, Additional Mathematics, Physics, Chemistry, Biology, Arts and Design, Computer Science, Global Perspectives, Drama, Economics, Business Studies, Chinese, Music, and Physical Education. General students choose about 6-8 courses to study in IG stage to adapt to international teaching. Students' test scores and their A-Level / IBDP courses greatly determine whether they can get admission into their ideal university and study the degree courses they desire.

剑桥IGCSE每年有两次考试季,分别在6月和11月。考试成绩在8月和次年1月公布。评分是等级制度的,从A\*到G,其中A\*表示最高成绩,G级则表示规定的最低成绩。

Cambridge IGCSE examination sessions occur twice a year, in June and November. Results are issued in August and January. Grades are benchmarked using eight internationally recognized grades, A\* to G, which have clear guidelines to explain the standard of achievement for each grade.



### > International Baccalaureate Diploma Program (IBDP)

国际文凭大学预科项目创建于1968年,是一个具有学术挑战性,学科平衡,有毕业考试的教育项目,供16-19岁的学生学习,使他们为成功地学习大学课程并投入其后的生活做好准备。该项目的设计是要培养孩子在智力、社交、情感和身体等方便取得全免发展。该项目已经获得了世界一流大学的广泛承认和尊重。

The International Baccalaureate® (IB) Diploma Programme (DP) is an assessed programme for students aged 16 to 19. It is respected by leading universities across the globe. Through the DP, schools are able to develop students who:

- have excellent breadth and depth of knowledge
- flourish physically, intellectually, emotionally and ethically
- study at least two languages
- excel in traditional academic subjects

国际文凭大学预科项目的学生必须从5个学科组(第1至第5学科组)中各选修一门课程,以保证他们对自己对最佳语言、(一门或多门)外语、社会科学、实验科学和数学获得广泛对知识和理解。学生还必须从第6学科组中选修一门艺术课程,或从第1至第5学科组再选修一门课程。学生可以学习大学预科项目对高级课程或普通课程。

要学习少则3门多则4门的高级课程(240个课时),其余为普通课程(150个课时)。学生可以用 英语、法语或西班牙语开展学习和参加考试。

Students choose courses from the following subject groups: studies in language and literature; language acquisition; individuals and societies; sciences; mathematics; and the arts. You may opt to study an additional sciences, individuals and societies, or languages course, instead of a course in the arts.

Students will take some subjects at higher level (HL) and some at standard level (SL). HL and SL courses differ in scope but are measured according to the same grade descriptors, with students expected to demonstrate a greater body of knowledge, understanding and skills at higher level.

Each student takes at least three (but not more than four) subjects at higher level, and the remaining at standard level. Standard level subjects take up 150 teaching hours. Higher level comprises 240 teaching hours.

除了这些学科学习之外,大学预科项目还以3项核心要素作为自己的特色,它们拓展学生的教育体验,挑战他们应用自己学到的知识和技能;

- 专题论文 篇幅为4000个英语单词,要求学生独立开展研究,深入讨论一个与他们正在学习的一门大学预科课程相关的问题。
- 认识论 为学生和教师提供机会,对丰富多才对认识方法和知识领域进行批判性反思。学生对认识对本质进行探究,加深他们对知识作为人类建构的理解。
- 创造、行动与服务(CAS)-使学生在整个大学预科项目期间,除了学术研修之外,还要参与一系列活动。"创造"鼓励学生开展艺术创作和创造性思考。"行动"旨在通过体育活动培养一种有益于健康的生活方式。"服务"与社区为开展新的学习提供一种载体,具有学术方面的价值。CAS的三个分支通过体验性学习加强学生在个人和人际方面的成长,使他们不断获得自我认识。

Made up of the three required components, the DP core aims to broaden students' educational experience and challenge them to apply their knowledge and skills.

The three core elements are:

- Theory of knowledge (TOK), in which students reflect on the nature of knowledge and on how we know what we claim to know.
- The extended essay (EE), which is an independent, self-directed piece of research, finishing with a 4,000-word paper.
- Creativity, activity, service (CAS), in which students complete a project related to those three
  concepts.

#### 课程评估与考试

项目结束时学生要参加书面考试,试卷由国际文凭组织聘任的外部阅卷人评定成绩。学生还要在学校完成一些评估作业,先由教师评判出这些作业的成绩,然后再由外部评审员对其进行评审,也可以将这些作业直接发送给外部主考人。

每门课程的评分范围均为1(最低分)至7(最高分)。作为完成认识论学习和专题论文的一揽子成绩,学生还可以最多获得额外的3分。毕业证书颁发给那些至少获得了24分总成绩的学生,他们在整个项目各学科中的成绩均不能低于最低分数要求,他们还要按照要求,令人满意的参与创造、行动与服务。大学预科项目学生所能够获得的最高总成绩为45分。

#### Assessment and Exams

The International Baccalaureate® (IB) Diploma Programme (DP) uses both internally and externally assessed components to assess student performance. For most courses, written examinations at the end of the DP form the basis of the assessment. This is because these examinations have high levels of objectivity and reliability.

Externally assessed coursework, completed by students over an extended period under authenticated teacher supervision, forms part of the assessment for several programme areas, including the TOK and EE.

In most subjects, students also complete in-school assessment tasks. These are either externally assessed or marked by teachers and then moderated by the IB.

In the DP, students receive grades ranging from 7 to 1, with 7 being highest. Students receive a grade for each DP course attempted.

A student's final diploma result score is made up of the combined scores for each subject. The diploma is awarded to students who gain at least 24 points, subject to certain minimum levels of performance including successful completion of the three essential elements of the DP core.

### > A-Level – General Certificate of Education Advanced Level (CAIE)

A-Level是英国普通中等教育证书考试高级水平,也是英国学生的大学入学考试课程。该课程证书被几乎所有英语授课的大学作为招生新生的入学标准。大部分学生都是用两年的时间修完本课程,第一年AS,第二年A2,但是能力很强的学生也可在更短的时间内修完。学生通常是在学习完IGCSE课程后,衔接A-Level课程,取得一定的成绩后可申请大学。

A-Level is the advanced level of GCE in the UK, and it is also the common university entrance examination course for British students. The course certificate is recognized as the admission standard for freshmen in almost all English teaching universities. Most students take two years to complete this course, the first year AS, the second year A2, but advanced students can also complete it in a shorter time. Generally, students can apply for universities after completing AS year while still studying their A-Levels.

目前,本校开设的A-Level课程使用的是CAIE考试局的教学大纲与课程设置。开设课程将基于现有的 IGCSE课程。

The A-Level courses in our school use the syllabus and curriculum of the CAIE examination board. Available courses will be based on the existing IGCSE courses.

剑桥国际AS & A-Level 每年有两次考试季,分别在6月和11月。考试成绩在8月和次年1月公布。学生将在所参加的每个科目获得单独的评分等级。剑桥国际A-Level的考试分数分为A\*级到E级,其中A\*级表示最高成绩,E级表示符合要求的最低成绩。剑桥国际AS-Level没有A\*级,只有A-E级

Cambridge AS & A-Level examination sessions occur twice a year, in June and November. Results are issued in August and January. The Cambridge International A-Level is reported on a grade scale from A\* (highest) to E (minimum required performance). There is no A\* grade for Cambridge International AS Levels, which run from grade A to E.

国内学子可利用剑桥国际AS & A-Level 获得包括英国、美国、加拿大、澳大利亚和德国在哪的世界各地一流大学的入学名额。

### 大学认可 University Recognition

Cambridge qualifications are recognised and valued by universities all around the world, including in the US, the UK, Australia, Canada, Germany and beyond. In places such as the United States and Canada, good grades in carefully chosen Cambridge International A Level subjects can result in up to one year of university course credit.

有700所以上的美国大学(含常青藤和广义常青藤所有成员大学)均认可剑桥国际AS & A-Level成绩。其中包括:布朗大学、哥伦比亚大学、康奈尔大学、达特茅斯大学、哈佛大学、麻省理工学院(MIT)、普林斯顿大学、斯坦福大学、宾夕法尼亚大学及耶鲁大学。

Over 700 universities in the US formally accept Cambridge International AS & A Levels, including all Ivy League and Ivy Plus universities. These universities include Brown, Harvard, MIT, Stanford and Yale. Many more US universities accept Cambridge qualifications on application. In the UK, all universities accept Cambridge qualifications.

### >> 高中国际课程时间规划 International Pathway Calendar

### Grade 9 - IGCSE Year 1 Calendar (Specific dates TBC later)

August	New students report to school Orientation days for new students Streaming tests School team selections	February	New students report to school Semester 2 commences & Opening ceremony School teams start Individual university/career counseling sessions Early entry registration for CAIE May/June external exams (English/Math/Chinese)	
September	Semester 1 commences & Opening ceremony Taster week Selecting subject options Teachers' Day celebrations School teams start Parents Engagement Night Mid-Autumn Festival Commemorating birth of Confucius School Anniversary Celebrations (3 years)	March	PTMs Book week Subject festivals Individual university/career counseling sessions Standard entry registration(deadline) for CAIE May/June external exams (English/Math/Chinese)	
	Sports Day University application questionnaire		Qingming Mid-term exams (internal) Late entry (involving late entry fees) registration for CAIE May/June external exams (English/Math/Chi- nese) Exam preparations (external) CAIE IGCSE English Speaking Exams (external)	
October	National Day University Counseling Workshops Individual university/career counseling sessions	April		
	School team selections		Labor's Day CAIE IGCSE external exams (English/Math/Chinese) Study tour Art festival Music festival Kuder assessments	
November	Mid-term exams (internal) PTMs	May		
	Technology festival Christmas & New Year celebration		Individual university/career counseling sessions	
December	Music concerts and bazaar Study tour Begin Revision University Counseling Workshops Individual university/career counseling sessions	June	Dragon Boat Festival Begin revision End-of-term exams (internal) Individual university/career counseling sessions	
January	New Year's Day End-of-term exams (internal) Kuder assessments	July	Summer Camp Student exchange programme Internships Study tours	

### Grade 10 - IGCSE Year 2 Calendar (Specific dates TBC later)

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August	New students report to school Orientation days for new students Streaming tests School team selections CAIE May/June exams result release Early entry registration for CAIE IGCSE October/November re-sit exams (English/Math/Chinese)	February	New students report to school Semester 2 commences & Opening ceremony School teams start Individual university/career counseling sessions Early entry registration for CAIE May/June external exams (all subjects)	
September	Semester 1 commences & Opening ceremony Teachers' Day celebrations School teams start Parents Engagement Night Mid-Autumn Festival Commemorating birth of Confucius School Anniversary Celebrations (3 years)	March	PTMs Book week Subject festivals Individual university/career counseling sessions Standard entry registration(deadline) for CAIE May/June external exams (all subjects)	
	Sports Day Individual university/career counseling sessions Standard(deadline) entry registration for CAIE IGCSE October/November re-sit exams (English/Math/Chinese) Re-sit exam preparations (external)	April	Qingming Mid-term exams (internal) Late entry (involving late entry fees) registration for CALE May/June external exams (all subjects) Exam preparations (external)	
	National Day CAIE IGCSE external re-sit exams (English/Math/Chinese)		Mock exams for external examinations CAIE IGCSE English Speaking Exams (external)	
October	University Counseling Workshops Individual university/career counseling sessions University counseling sessions with parents	May	Labor's Day CAIE IGCSE external exams (all subjects) Study tour	
November	Mid-term exams (internal) PTMs University Counseling Workshops Individual university/career counseling sessions University counseling sessions with parents		Art festival Music festival Kuder assessments Individual university/career counseling sessions Course selection guidance for G11 – G12	
December	Technology festival Christmas & New Year celebration Music concerts and bazaar Study tour Begin Revision Individual university/career counseling sessions	June	Dragon Boat Festival CAIE IGCSE external exams (all subjects) Individual university/career counseling sessions Course selection guidance for G11 – G12 University counseling sessions with parents	
January	New Year's Day End-of-term exams (internal) University Counseling Workshops Kuder assessments Individual university/career counseling sessions	July	Summer Camp Student exchange programme Internships Study tours	

### Grade 11 - IBDP Year 1 Calendar (Specific dates TBC later)

Grade 11 -	IBDP Year 1 Calendar (Specific	c dates 16	C tater)	
August	Student exchange programme Internships Study tours Enhancement programmes IELTS/TOEFL classes/exams Subject competitions New students report to school Orientation days for new students Streaming tests School team selections CAIE IGCSE May/June exams result release Early entry registration for CAIE IGCSE October/November re-sit exams (all subjects)	February	IELTS/TOEFL exams (external) SAT/ACT preparations New Students report to school Semester 2 commences & Opening ceremony School teams start Individual university/career counseling sessions Subject competitions CAS activities EE Fair English A & Chinese A: Written task #2 submission 1  IELTS/TOEFL exams (external) SAT/ACT preparations	
September	Semester 1 commences & Opening ceremony Taster week Confirm pathway and subject choices CAS introduction and contract Subject competitions Teachers' Day celebrations School teams start Parents Engagement Night Mid-Autumn Festival Commemorating birth of Confucius School Anniversary Celebrations (3 years)	March	STEP exam preparation PTMs Book week Subject festivals Individual university/career counseling sessions Subject competitions CAS activities EE Submit choice and allocation of supevisor Book teacher referee for university application English A & Chinese A: Further oral activity #2 Chinese Literature: Written assignment submission 1	
	Sports Day Individual university/career counseling sessions Standard(deadline) entry registration for CAIE IGCSE October/November re-sit exams (all subjects) Re-sit exam preparations (external)		Qingming Mid-term exams (internal) Economics: IA commentary #2 submission 1 Music: Links submission 1 Computer Science: Submission 1 SAT/ACT preparations	
October	National Day CAIE IGCSE external re-sit exams (all subjects) University Counseling Workshops Individual university/career counseling sessions Subject competitions CAS activities English A & Chinese A: Further oral activity #1	April	STEP exam preparation Subject competitions CAS activities EE First Mandatory reflection meeting TOK Practice Exhibition Book teacher referee for university application Book Personal Statement mentor Meet with referee and mentor on regular basis Begin initial PS draft	
November	CAIE IGCSE external re-sit exams (all subjects) Mid-term AS exams (internal) IELTS/TOEFL exam preparation and registration PTMs University Counseling Workshops Individual university/career counseling sessions Kuder assessments Subject competitions CAS First Interview Economics IA commentary #1 submission 1	May	Labor's Day English A: Literature written assignment submission 1 EE: Second Mandatory reflection meeting TOK: Presentations SAT/ACT exams (external) STEP exam preparation Study tour Art festival Music festival Kuder assessments Subject competitions CAS Second Interview Individual university/career counseling sessions Book Personal Statement mentor Meet with referee and mentor on regular basis Begin initial PS draft	
December	Technology festival Christmas & New Year celebration IELTS/TOEFL exam preparation and registration SAT/ACT preparations Music concerts and bazaar Study tour Begin Revision			
	Individual university/career counseling sessions Subject competitions CAS activities TOK: Practice Essay English A & Chinese A: Written task #1 submission 1	June	Dragon Boat Festival Visual Arts: Comparative study submission 1 STEP exam (external) Subject competitions CAS activities TOK Exhibition Economics: Commentary #1 due	
	New Year's Day CAIE October/November result release End-of-term exams (internal) IELTS/TOEFL exams (external)		Individual university/career counseling sessions University counseling sessions with parents Meet with referee and mentor on regular basis Begin initial PS draft	
January	SAT/ACT preparations University Counseling Workshops Individual university/career counseling sessions Subject competitions CAS activities	July	Summer Camp Student exchange programme Internships IELTS/TOEFL/SAT/ACT Enhancement programmes Finalizing personal statements Finalizing reference letters	

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August	Summer Camp Student exchange programme Internships IELTS/TOEFL/SAT/ACT exams Enhancement programmes Finalizing personal statements Finalizing reference letters Subject competitions Admissions Testings preparation EE: Submit full first draft	December	English A: Written Task Submission 1 Economics: IA Commentary #3 submission 1TOK: presentations CAS: Portfolio check EE: viva voce and Final Mandatory reflection meeting University application guidance Finalizing personal statements Finalizing reference letters Finalizing artwork portfolio Submit regular applications		
September	English A & Chinese A: Literature written assignment final submission English A SL: Interactive oral presentation Math: Exploration IA submission 1 Economics: IA commentary #1 submission 1 English A HL: Written task #4 submission 1 IELTS/TOEFL/SAT/ACT exams Individual university/career counseling sessions Finalizing personal statements	January	Interview trainings Oxbridge interviews (UK) Music: recordings End-of-term exams (internal) IELTS/TOEFL exams Finalizing personal statements Finalizing reference letters Submit regular applications		
	Finalizing reference letters Finalizing artwork portfolio University application guidance Admissions Testings preparation Submit ED/AD/Oxbridge applications	February	IELTS/TOEFL exams English A & Chinese A: Written Assignment Final Submission English B: Interactive orals English B: Written Assignment Final Submission		
Outhor	English A HL: Interactive oral presentation English A & Chinese A: Individual oral commentary English B: Interactive orals Psychology: IA due IELTS/TOEFL/SAT/ACT exams University Counseling Workshops Individual university/career counseling sessions Finalizing personal statements	TOK: Essay Final Submission  IELTS/TOEFL/SAT/ACT exams  Computer Science: IA Final Submission English B: Interactive Oral Activity Economics: IA Final Submission English B: Individual Oral Commentary Music: IA portfolio upload STEP exam preparation			
October	Finalizing reference letters Finalizing artwork portfolio University application guidance Admissions Testings (external) Submit ED/AD/Oxbridge applications Submit regular applications Interview trainings Oxbridge interview visa preparations	April	CAS: Final Interviews Music: IA portfolio upload deadline Music: EA Components upload CAS: Final interviews Visual Arts exhibition SAT/ACT exams STEP exam preparation Decide firm and insurance choices		
	Math: Exploration IA Final Submission		Reply to universities Apply for accommodation		
November	Economics: IA Commentary #2 submission 1 English A: Individual oral commentary Physics: IA submission 1 Biology: IA submission 1 Chemistry: IA submission 1 Chinese Lit: Individual oral commentary TOK Essay first draft EE: Submit full final draft	May	IBO exams (all subjects) SAT/ACT exams (external) STEP exam preparation Decide firm and insurance choices Reply to universities Pay deposits Apply for accommodation		
November	IELTS/TOEFL/SAT/ACT exams Mid-term exams (internal) Finalizing personal statements Finalizing reference letters Finalizing artwork portfolio University application guidance	June	STEP exams (external) Decide firm and insurance choices Reply to universities Apply for accommodation Pay deposits Visa application		
	Submit ED/AD/Oxbridge applications Submit regular applications Interview trainings Oxbridge interview visa preparations	July	Reply to universities Apply for accommodation Pay deposits Visa application Book flight tickets		
December	IELTS/TOEFL/SAT/ACT exams Physics: IA Final Submission Biology: IA Final Submission English B: Interactive orals English A: optional 3rd Further Oral Activity Chemistry: IA Final Submission	August	Visa application Clearing Submit final transcripts Apply for accommodation Book flight tickets		

### Grade 11 - Advanced Subsidiary (AS) Year Calendar (Specific dates TBC later)

Grade II	Advanced Subsidiary (AS) Tec	ii Catciida	(Specific dates The tater)			
August	Student exchange programme Internships Study tours Enhancement programmes IELTS/TOEFL classes/exams Subject competitions New students report to school Orientation days for new students Streaming tests School team selections CAIE May/June exams result release Early entry registration for CAIE IGCSE October/November re-sit exams (all subjects)	February	IELTS/TOEFL exams (external) SAT/ACT preparations New students report to school Semester 2 commences & Opening ceremony School teams start Individual university/career counseling sessions Subject competitions CAS activities Early entry registration for CAIE May/June external AS/AL exams (all subjects)  IELTS/TOEFL exams (external) SAT/ACT preparations			
September	Semester 1 commences & Opening ceremony Taster week Confirm pathway and subject choices CAS introduction Subject competitions Teachers' Day celebrations School teams start Parents Engagement Night Mid-Autumn Festival Commemorating birth of Confucius School Anniversary Celebrations (3 years)	March	STEP exam preparation PTMs Book week Subject festivals Individual university/career counseling sessions Subject competitions CAS activities Standard entry registration(deadline) for CAIE May/June external AS/AL exams (all subjects) Book teacher referee for university application			
	Sports Day Individual university/career counseling sessions Standard(deadline) entry registration for CAIE IGCSE October/November re-sit exams (all subjects) Re-sit exam preparations (external)		Qingming Mid-term exams (internal) Late entry(involving late entry fees) registration for CAIE May/June external A5/AL exams (all subjects) Exam preparations (external) Mock exams for external examinations SAT/ACT preparations STEP exam preparation Subject competitions CAS activities Book teacher referee for university application Book Personal Statement mentor Meet with referee and mentor on regular basis Begin initial PS draft			
October	National Day CAIE IGCSE external re-sit exams (all subjects) University Counseling Workshops Individual university/career counseling sessions Subject competitions CAS activities	April				
November	CAIE ICCSE external re-sit exams (all subjects) Mid-term AS exams (internal) IELTS/TOEFL exam preparation and registration PTMs University Counseling Workshops Individual university/career counseling sessions Kuder assessments Subject competitions CAS activities	May	Labor's Day CAIE external AS/AL exams (all subjects) SAT/ACT exams (external) STEP exam preparation Study tour Art festival Music festival Kuder assessments Subject competitions CAS activities Individual university/career counseling			
	Technology festival Christmas & New Year celebration IELTS/TOEFL exam preparation and registration		sessions Book Personal Statement mentor Meet with referee and mentor on regular basis Begin initial PS draft			
December	December  SAT/ACT preparations  Music concerts and bazaar  Study tour  Begin Revision  Individual university/career counseling sessions  Subject competitions  CAS activities		Dragon Boat Festival CAIE external AS/AL exams (all subjects) STEP exam (external) Subject competitions CAS activities Individual university/career counseling sessions University counseling sessions with parents Meet with referee and mentor on regular basis			
January	New Year's Day CAIE October/November result release End-of-term exams (internal) IELTS/TOEFL exams (external) SAT/ACT preparations University Counseling Workshops Individual university/career counseling sessions Subject competitions CAS activities	July	Begin initial PS draft  Summer Camp Student exchange programme Internships IELTS/TOEFL/SAT/ACT Enhancement programmes Finalizing personal statements Finalizing reference letters			

August		Summer Camp Student exchange programme Internships IELTS/TOEFL/SAT/ACT exams Enhancement programmes Finalizing personal statements Finalizing reference letters	January	CAIE October/November result release End-of-term exams (internal) IELTS/TOEFL exams Finalizing personal statements Finalizing reference letters Submit regular applications		
		Subject competitions CAIE May/June exams result release Early entry registration for CAIE AS/AL October/November exams (all subjects) Admissions Testings preparation	February	IELTS/TOEFL exams Early entry registration for CAIE May/June external AS/AL exams (all subjects)		
September		IELTS/TOEFL/SAT/ACT exams Individual university/career counseling sessions Standard(deadline) entry registration for CAIE AS/AL October/November exams (all subjects) AS/AL exam preparations (external)	March	IELTS/TOEFL/SAT/ACT exams Standard entry registration(deadline) for CAIE May/June external AS/AL exams (all subjects) STEP exam preparation		
October	Finalizing personal statements Finalizing reference letters Finalizing artwork portfolio University application guidance Admissions Testings preparation Submit ED/AD/Oxbridge applications	April	Late entry(involving late entry fees) registration for CAIE May/June external AS/AL exams (all subjects) AS/AL exam preparations (external) Mock exams for external examinations SAT/ACT exams STEP exam preparation			
	CAIE AS/AL external exams (all subjects) IELTS/TOEFL/SAT/ACT exams University Counseling Workshops Individual university/career counseling		Decide firm and insurance choices Reply to universities Apply for accommodation			
	sessions Finalizing personal statements Finalizing reference letters Finalizing artwork portfolio University application guidance Admissions Testings (external) Submit ED/AD/Oxbridge applications Submit regular applications Interview trainings	May	CAIE external AS/AL exams (all subjects) SAT/ACT exams (external) STEP exam preparation Decide firm and insurance choices Reply to universities Pay deposits Apply for accommodation			
Oxbridge interview visa preparations  CAIE AS/AL external exams (all subjects) IELTS/TOEFL/SAT/ACT exams Mid-term AL exams (internal) Finalizing personal statements Finalizing reference letters Finalizing artwork portfolio University application guidance		June	CAIE external AS/AL exams (all subjects) STEP exams (external) Decide firm and insurance choices Reply to universities Apply for accommodation Pay deposits Visa application			
		Submit regular applications Interview trainings Oxbridge interview visa preparations	July	Reply to universities Apply for accommodation Pay deposits Visa application		
		IELTS/TOEFL/SAT/ACT exams University application guidance Finalizing personal statements		Book flight tickets		
	December	Finalizing reference letters Finalizing artwork portfolio Submit regular applications Interview trainings Oxbridge interviews (UK)	August	Visa application Clearing Submit final transcripts Apply for accommodation Book flight tickets		

### IGCSE考试时间表 IGCSE Examinations Timetable

Qualification	Code	Syllabus	Component Title	Exam Date	Session	Marks Due	Marks Due
						Deadline	Deadline
IGCSE	0400/01	Art and Design	Coursework Assignment	31 Oct 21	-	-	31 Oct 21
IGCSE	0400/02	Art and Design	Externally Set Assignment	01 Jul 21 - 31 Oct 21	-	8h	-
IGCSE	0410/02	Music	Performing	-	_	_	31 Oct 21
IGCSE	0410/03	Music	Composing	-	-	-	31 Oct 21
IGCSE	0410/13	Music	Listening 13	03 Nov 21	AM	1h 15m	03 Nov 21
IGCSE	0411/02	Drama	Coursework	-	-	-	31 Oct 21
IGCSE	0413/02	Physical Education	Coursework	-	-	-	31 Oct 21
IGCSE	0413/12	Physical Education	Theory 12	13 Oct 21	PM	1h 45m	13 Oct 21
IGCSE	0450/12	Business Studies	Short Answer/Data Response 12	08 Nov 21	PM	1h 30m	08 Nov 21
IGCSE	0450/22	Business Studies	Case Study 22	10 Nov 21	PM	1h 30m	10 Nov 21
IGCSE	0455/13	Economics	Multiple Choice 13	15 Nov 21	AM	45m	15 Nov 21
IGCSE	0455/23	Economics	Structured Questions 23	02 Nov 21	AM	2h 15m	02 Nov 21
IGCSE	0457/02 0457/03	Global Perspectives	Individual Report	31 Oct 21	-	-	31 Oct 21
IGCSE IGCSE	0457/03	Global Perspectives Global Perspectives	Team Project Written Paper 12	- 19 Oct 21	- PM	- 1h 15m	31 Oct 21 19 Oct 21
IGCSE	0478/13	Computer Science	Paper 13 Theory	18 Oct 21	AM	1h 45m	18 Oct 21
IGCSE	0478/23	Computer Science	Paper 23 Problem-Solving and	20 Oct 21	AM	1h 45m	20 Oct 21
			Programming				
IGCSE	0500/13	First Language English (Oral Endorsement)	Reading 13	26 Oct 21	AM	2h	26 Oct 21
IGCSE	0500/23	First Language English (Oral Endorsement)	Directed Writing & Comp 23	29 Oct 21	AM	2h	29 Oct 21
IGCSE	0510/12	English as a Second Language (Speaking Endorsement)	Reading and Writing (Core) 12	06 Oct 21	PM	1h 30m	06 Oct 21
IGCSE	0510/22	English as a Second Language (Speaking Endorsement)	Reading and Writing (Extended) 22	06 Oct 21	PM	2h	06 Oct 21
IGCSE	0510/32	English as a Second Language (Speaking Endorsement)	Listening (Core) 32	13 Oct 21	PM	40m	13 Oct 21
IGCSE	0510/42	English as a Second Language (Speaking Endorsement)	Listening (Extended) 42	13 Oct 21	PM	50m	13 Oct 21
IGCSE	0510/52	English as a Second Language (Speaking Endorsement)	Speaking 52	01 Oct 21 - 26 Oct 21	-	15m	28 Oct 21
IGCSE	0580/12	Mathematics (Without Coursework)	Paper 12 (Core)	18 Oct 21	PM	1h	18 Oct 21
IGCSE	0580/22	Mathematics (Without Coursework)	Paper 22 (Extended)	18 Oct 21	PM	1h 30m	18 Oct 21
IGCSE	0580/32	Mathematics (Without Coursework)	Paper 32 (Core)	21 Oct 21	PM	2h	21 Oct 21
IGCSE	0580/42	Mathematics (Without Coursework)	Paper 42 (Extended)	21 Oct 21	PM	2h 30m	21 Oct 21
IGCSE	0606/13	Additional Mathematics	Paper 13	11 Oct 21	AM	2h	11 Oct 21
IGCSE	0606/23	Additional Mathematics	Paper 23	15 Oct 21	AM	2h	15 Oct 21
IGCSE	0610/13	Biology	Multiple Choice (Core) 13	16 Nov 21	AM	45m	16 Nov 21
IGCSE	0610/23	Biology	Multiple Choice (Extended) 23	16 Nov 21	AM	45m	16 Nov 21
IGCSE	0610/33	Biology	Theory (Core) 33	22 Oct 21	AM	1h 15m	22 Oct 21
IGCSE	0610/43	Biology	Theory (Extended) 43	22 Oct 21	AM	1h 15m	22 Oct 21
IGCSE IGCSE	0610/53	Biology	Practical Test 53	19 Oct 21 19 Oct 21	AM AM	1h 15m 1h	19 Oct 21 19 Oct 21
IGCSE	0610/63 0620/13	Biology Chemistry	Alternative to Practical 63 Multiple Choice (Core) 13	18 Nov 21	AM	45m	18 Nov 21
IGCSE	0620/13	Chemistry	Multiple Choice (Extended) 23	18 Nov 21	AM	45m	18 Nov 21
IGCSE	0620/33	Chemistry	Theory (Core) 33	18 Oct 21	AM	1h 15m	18 Oct 21
IGCSE	0620/43	Chemistry	Theory (Extended) 43	18 Oct 21	AM	1h 15m	18 Oct 21
IGCSE	0620/53	Chemistry	Practical Test 53	21 Oct 21	AM	1h 15m	21 Oct 21
IGCSE	0620/63	Chemistry	Alternative to Practical 63	21 Oct 21	AM	1h	21 Oct 21
IGCSE	0625/12	Physics	Multiple Choice (Core) 12	09 Nov 21	PM	45m	09 Nov 21
IGCSE	0625/22	Physics	Multiple Choice (Extended) 22	09 Nov 21	PM	45m	09 Nov 21
IGCSE	0625/32	Physics	Theory (Core) 32	20 Oct 21	PM	1h 15m	20 Oct 21
IGCSE	0625/42	Physics	Theory (Extended) 42	20 Oct 21	PM	1h 15m	20 Oct 21
IGCSE	0625/52	Physics	Practical Test 52	28 Oct 21	PM	1h 15m	28 Oct 21
IGCSE	0625/62	Physics	Alternative to Practical 62	28 Oct 21	PM	1h	28 Oct 21
IGCSE	0654/12	Co-ordinated Sciences (Double Award)	Multiple Choice Core 12	09 Nov 21	PM	45m	09 Nov 21
IGCSE	0654/22	Co-ordinated Sciences (Double Award)	Multiple Choice Extended 22	09 Nov 21	PM	45m	09 Nov 21
IGCSE	0654/32	Co-ordinated Sciences (Double Award)	Core Theory 32	20 Oct 21	PM	2h	20 Oct 21
IGCSE	0654/42	Co-ordinated Sciences (Double Award)	Extended Theory 42	20 Oct 21	PM	2h	20 Oct 21
IGCSE	0654/52	Co-ordinated Sciences (Double Award)	Practical Test 52	03 Nov 21	AM	2h	03 Nov 21
IGCSE	0654/62	Co-ordinated Sciences (Double Award)	Alternative to Practical 62	02 Nov 21	PM	1h 30m	02 Nov 21

### A-Level考试时间表A-Level Examinations Timetable

Qualification	Code	Syllabus	Component Title	Exam Date	Session	Marks Due Deadline	Marks Due Deadline
GCE AS & A Level	9231/12	Further Mathematics	Further Pure Mathematics 12	01 Nov 21	PM	2h	01 Nov 21
GCE AS & A Level	9231/22	Further Mathematics	Further Pure Mathematics 22	03 Nov 21	PM	2h	03 Nov 21
GCE AS & A Level	9231/32	Further Mathematics	Further Mechanics 32	08 Nov 21	PM	1h 30m	08 Nov 21
GCE AS & A Level	9231/42	Further Mathematics	Further Probability & Statistics42	10 Nov 21	PM	1h 30m	10 Nov 21
GCE AS & A Level	9239/02	Global Perspectives & Research	Essay	31 Oct 21	-	-	31 Oct 21
GCE AS & A Level	9239/03	Global Perspectives & Research	Team Project	31 Oct 21	_	-	31 Oct 21
GCE AS & A Level	9239/04	Global Perspectives & Research	Research Report	_	_	_	31 Oct 21
GCE AS & A Level	9239/12	Global Perspectives & Research	Written Examination 12	19 Oct 21	PM	1h 30m	19 Oct 21
GCE AS & A Level	9396/02	Physical Education	AS Level Coursework	-	-	-	31 Oct 21
GCE AS & A Level	9396/04	Physical Education	A Level Coursework	_	_	_	31 Oct 21
GCE AS & A Level	9396/13	Physical Education	Written Paper 13	10 Nov 21	AM	2h 30m	10 Nov 21
GCE AS & A Level	9396/33	Physical Education	Written Paper 33	16 Nov 21	AM	2h 30m	16 Nov 21
GCE AS & A Level	9479/01	Art and Design	Coursework	31 Oct 21	Airi	211 30111	31 Oct 21
GCE AS & A Level	9479/02	Art and Design	Externally Set Assignment	01 Jul 21 -	-	15h	-
				31 Oct 21			
GCE AS & A Level	9479/03	Art and Design	Personal Investigation	31 Oct 21	-	-	31 Oct 21
GCE AS & A Level	9481/01	Digital Media and Design	Portfolio	31 Oct 21	-	-	31 Oct 21
GCE AS & A Level	9481/02	Digital Media and Design	Externally Set Assignment	01 Jul 21 - 31 Oct 21	-	10h	-
GCE AS & A Level	9481/03	Digital Media and Design	Personal Investigation	31 Oct 21	-	-	31 Oct 21
GCE AS & A Level	9482/02	Drama	Practical Drama	-	-	-	15 Oct 21
GCE AS & A Level	9482/03	Drama	Theatre-Making And Performing	-	-	-	15 Oct 21
GCE AS & A Level	9482/04	Drama	Theatre In Context	31 Oct 21	-	-	31 Oct 21
GCE AS & A Level	9482/13	Drama	Open-Book Written Examination	17 Nov 21	AM	2h	17 Nov 21
GCE AS & A Level	9483/02	Music	Practical Music	-	-	-	31 Oct 21
GCE AS & A Level	9483/03	Music	Extended Performance	31 Oct 21	_	-	31 Oct 21
GCE AS & A Level	9483/04	Music	Extended Composition	31 Oct 21	_	_	31 Oct 21
GCE AS & A Level	9483/05	Music	Investigating Music	31 Oct 21	_	_	31 Oct 21
GCE AS & A Level	9483/13	Music	Listening 13	12 Nov 21	AM	2h	12 Nov 2
GCE AS & A Level	9608/12	Computer Science	Theory Fundamentals 12	15 Oct 21	PM	1h 30m	15 Oct 21
GCE AS & A Level	9608/22	Computer Science	Problem-Solving & Programming		PM	2h	22 Oct 21
			22				
GCE AS & A Level	9608/32	Computer Science	Advanced Theory 32	29 Oct 21	PM	1h 30m	29 Oct 21
GCE AS & A Level	9608/42	Computer Science	Further Problem-Solving & Programming 42	05 Nov 21	PM	2h	05 Nov 2
GCE AS & A Level	9609/12	Business	Short Answer and Essay 12	18 Oct 21	PM	1h 15m	18 Oct 21
GCE AS & A Level	9609/22	Business	Data Response 22	21 Oct 21	PM	1h 30m	21 Oct 21
GCE AS & A Level	9609/32	Business	Case Study 32	28 Oct 21	PM	3h	28 Oct 21
GCE AS & A Level	9618/12	Computer Science	Theory Fundamentals 12	15 Oct 21	PM	1h 30m	15 Oct 21
GCE AS & A Level	9618/22	Computer Science	Problem Solving & Programming 22	22 Oct 21	PM	2h	22 Oct 21
GCE AS & A Level	9618/32	Computer Science	Advanced Theory 32	29 Oct 21	PM	1h 30m	29 Oct 21
GCE AS & A Level	9618/42	Computer Science	Practical 42	05 Nov 21	PM	2h 30m	05 Nov 2
GCE AS & A Level	9700/13	Biology	Multiple Choice 13	17 Nov 21	AM	1h	17 Nov 21
GCE AS & A Level	9700/23	Biology	AS Level Structured Questions	22 Oct 21	AM	1h 15m	22 Oct 21
GCE AS & A Level	9700/35	Biology	23 Advanced Practical Skills 35	12 Oct 21	AM	2h	12 Oct 21
GCE AS & A Level	9700/43	Biology		01 Nov 21	AM	2h	01 Nov 2
GCE AS & A Level	9700/53	Biology	Planning, Analysis and	10 Nov 21	AM	1h 15m	10 Nov 2
GCE AS & A Level	9701/13	Chemistry	Evaluation 53 Multiple Choice 13	16 Nov 21	AM	1h	16 Nov 2
GCE AS & A Level	9701/23	Chemistry	AS Level Structured Questions	18 Oct 21	AM	1h 15m	18 Oct 21
	9701/35	Chemistry	Advanced Practical Skills 35	05 Oct 21	AM	2h	05 Oct 21
GCE AS & A Level	9701/43	Chemistry	A Level Structured Questions 43		AM	2h	21 Oct 21
GCE AS & A Level			Planning, Analysis and	09 Nov 21	AM	1h 15m	09 Nov 2
GCE AS & A Level		Chemistry					
GCE AS & A Level GCE AS & A Level	9701/53	Chemistry	Evaluation 53			41.45	
GCE AS & A Level GCE AS & A Level GCE AS & A Level	9701/53 9702/13	Physics	Evaluation 53 Multiple Choice 13	18 Nov 21	AM	1h 15m	18 Nov 2
GCE AS & A Level GCE AS & A Level GCE AS & A Level	9701/53		Evaluation 53		AM AM	1h 15m 1h 15m	18 Nov 2
GCE AS & A Level GCE AS & A Level GCE AS & A Level GCE AS & A Level	9701/53 9702/13	Physics	Evaluation 53  Multiple Choice 13  AS Level Structured Questions	18 Nov 21			18 Nov 2 20 Oct 2
GCE AS & A Level	9701/53 9702/13 9702/23	Physics Physics	Evaluation 53 * Multiple Choice 13 AS Level Structured Questions 23 Advanced Practical Skills 35	18 Nov 21 20 Oct 21	AM	1h 15m	18 Nov 2 20 Oct 2 07 Oct 2
GCE AS & A Level	9701/53 9702/13 9702/23 9702/35	Physics Physics	Evaluation 53 * Multiple Choice 13 AS Level Structured Questions 23 Advanced Practical Skills 35 A Level Structured Questions 43 Planning, Analysis and	18 Nov 21 20 Oct 21 07 Oct 21	AM AM	1h 15m 2h	
GCE AS & A Level	9701/53 9702/13 9702/23 9702/35 9702/43 9702/53	Physics Physics Physics Physics Physics	Evaluation 53 Multiple Choice 13 AS Level Structured Questions 23 Advanced Practical Skills 35 A Level Structured Questions 43 Planning, Analysis and Evaluation 53	18 Nov 21 20 Oct 21 07 Oct 21 03 Nov 21 05 Nov 21	AM AM AM	1h 15m 2h 2h 1h 15m	18 Nov 2 20 Oct 2 07 Oct 2 03 Nov 2 05 Nov 2
GCE AS & A Level	9701/53 9702/13 9702/23 9702/35 9702/43 9702/53 9708/12	Physics Physics Physics Physics Physics Economics	Evaluation 53 * Multiple Choice 13 AS Level Structured Questions 23 Advanced Practical Skills 35 A Level Structured Questions 43 Planning, Analysis and Evaluation 53 AS Level Multiple Choice 12	18 Nov 21 20 Oct 21 07 Oct 21 03 Nov 21 05 Nov 21 16 Nov 21	AM AM AM AM	1h 15m 2h 2h 1h 15m 1h	18 Nov 2 20 Oct 2 07 Oct 2 03 Nov 2 05 Nov 2
GCE AS & A Level	9701/53 9702/13 9702/23 9702/35 9702/43 9702/53	Physics Physics Physics Physics Physics	Evaluation 53 Multiple Choice 13 AS Level Structured Questions 23 Advanced Practical Skills 35 A Level Structured Questions 43 Planning, Analysis and Evaluation 53	18 Nov 21 20 Oct 21 07 Oct 21 03 Nov 21 05 Nov 21	AM AM AM	1h 15m 2h 2h 1h 15m	18 Nov 2 20 Oct 2 07 Oct 2 03 Nov 2 05 Nov 2

Qualification	Code	Syllabus	Component Title	Exam Date	Session	Marks Due Deadline	Marks Due Deadline
GCE AS & A Level	9708/42	Economics	A Level Data Response and Essays 42	26 Oct 21	PM	2h 15m	26 Oct 21
GCE AS & A Level	9709/13	Mathematics	Pure Mathematics 1 (13)	18 Oct 21	AM	1h 50m	18 Oct 21
GCE AS & A Level	9709/33	Mathematics	Pure Mathematics 3 (33)	02 Nov 21	AM	1h 50m	02 Nov 21
GCE AS & A Level	9709/43	Mathematics	Mechanics (43)	29 Oct 21	AM	1h 15m	29 Oct 21
GCE AS & A Level	9709/53	Mathematics	Probability & Statistics 1 (53)	27 Oct 21	AM	1h 15m	27 Oct 21
GCE AS & A Level	9709/63	Mathematics	Probability & Statistics 2 (63)	29 Oct 21	AM	1h 15m	29 Oct 21
GCE AS & A Level	9715/22	Chinese	Reading & Writing 22	12 Oct 21	PM	1h 45m	12 Oct 21
GCE AS & A Level	9715/32	Chinese	Essay 32	19 Oct 21	PM	1h 30m	19 Oct 21
GCE AS & A Level	9715/42	Chinese	Texts 42	22 Oct 21	PM	2h 30m	22 Oct 21

### >> IGCSE开设科目简介(英) IGCSE Subject Brief

# **CAIE IGCSE Subjects Brief**

(offered in Shanghai Hongwen 2021 - 2022)

### Art & Design - 0400

The Cambridge IGCSE Art & Design syllabus aims to encourage a personal response by stimulating imagination, sensitivity, conceptual thinking, powers of observation and analytical ability. Learners gain confidence and enthusiasm as they develop technical skills in two and three dimensional form and composition, and are able to identify and solve problems in visual and tactile forms. They also learn how to develop ideas from initial attempts to final solutions. An ideal foundation for further study, Cambridge IGCSE Art & Design also develops a greater awareness of the role played by the visual arts in society and in history, broadening cultural horizons and individual experience.

### Biology - 0610

Cambridge IGCSE Biology helps learners to understand the biological world in which they live and take an informed interest in science and scientific developments. The syllabus includes the basic principles and concepts that are fundamental to the subject, some current applications of biology, and a strong emphasis on practical skills.

Learners also develop an understanding of the scientific skills essential for progression to Cambridge International AS & A-Level, further education or a career related to science.

#### Business Studies - 0450

The Cambridge IGCSE Business Studies syllabus develops learners' understanding of business activity in the public and private sectors, and the importance of innovation and change. Learners find out how the major types of business organization are established, financed and run, and how their activities are regulated. Factors influencing business decision-making are also considered, as are the essential values of cooperation and interdependence.

Learners not only study business concepts and techniques but also enhance related skills such as numeracy and enquiry. The syllabus provides both a foundation for further study at Cambridge International A-Level and an ideal preparation for the world of work.

### Chemistry - 0620

Cambridge IGCSE Chemistry helps learners to understand the technological world in which they live and take an informed interest in science and scientific developments. The syllabus includes the basic principles and concepts that are fundamental to the subject, some current applications of chemistry, and a strong emphasis on practical skills.

Learners also develop an understanding of the scientific skills essential for progression to Cambridge International AS & A-Level, further education or a career related to science.

### Chinese – First Language – 0509

The Cambridge IGCSE First Language Chinese syllabus is designed for learners whose first language is Chinese. The syllabus develops learners' ability to communicate clearly, accurately and effectively. They learn how to employ a wide-ranging vocabulary, use correct grammar, spelling and punctuation, and develop a personal style and an awareness of the audience being addressed.

Learners are also encouraged to read widely, both for their own enjoyment and in order to develop an appreciation of how writers achieve their effects. The syllabus also complements other areas of study by encouraging skills of more general application.

### Chinese – Second Language – 0523

Cambridge IGCSE Chinese as a Second Language is designed for learners who already have a working knowledge of the language and who want to consolidate their understanding to progress their education or career. Through their studies, learners achieve a thorough understanding of a wide range of registers and styles and learn to communicate appropriately in different situations.

The syllabus focuses on the linked language skills of reading, writing, listening and oral communication. Through their study of Cambridge IGCSE Chinese as a Second Language, learners can achieve a level of practical communication ideal for everyday use, which can also form the basis for further, more in-depth language study.

### Computer Science - 0478

Cambridge IGCSE Computer Science helps learners develop an interest in computational thinking and an understanding of the principles of problem-solving using computers. They apply this understanding to create computer-based solutions to problems using algorithms and a high-level programming language. Learners also develop a range of technical skills, and the ability to effectively test and evaluate computing solutions.

Studying Cambridge IGCSE Computer Science helps learners appreciate current and emerging computing technologies, the benefits of their use and recognize their potential risks. It provides an ideal foundation for progression to Cambridge International AS & A-Level and is valuable for other areas of study and everyday life.

#### Drama - 0411

Through practical and theoretical study, learners develop an understanding and enjoyment of drama, developing group and individual skills and studying ways to communicate ideas and feelings to an audience. They learn how to discover the performance possibilities of a text and other stimuli, and devise dramatic material of their own. Learners also develop their performance skills, the demonstration of which will form part of the final assessment.

#### Economics - 0455

The Cambridge IGCSE Economics syllabus develops an understanding of economic theory, terminology and principles. Learners study the economics of different countries and how these interrelate. They also learn to work with simple economics data and to use the tools of economic analysis. Learners apply understanding of economics to current economic issues.

The Cambridge IGCSE Economics syllabus provides a foundation for further study, including Cambridge International AS & A-Level Economics, or the equivalent.

### English - First Language - 0500

Cambridge IGCSE First Language English is designed for learners whose first language is English. The course enables learners to:

- · develop the ability to communicate clearly, accurately and effectively when speaking and writing
- · use a wide range of vocabulary, and the correct grammar, spelling and punctuation
- · develop a personal style and an awareness of the audience being addressed.

Learners are also encouraged to read widely, both for their own enjoyment and to further their awareness of the ways in which English can be used. Cambridge IGCSE First Language English also develops more general analysis and communication skills such as inference, and the ability to order facts and present opinions effectively.

### English as a Second Language (Speaking endorsement) - 0510

Cambridge IGCSE English as a Second Language is designed for learners who already have a working knowledge of the language and who want to consolidate their understanding in order to progress in their education or career. Through their studies, learners will improve their ability to understand and use English in a range of situations.

The aim is to achieve a level of practical communication ideal for everyday use, which can also form the basis for further, more in-depth language study. In Syllabus 0510, marks for the speaking component do not contribute to the overall grade candidates receive for the written components.

### Global Perspectives - 0457

Meeting government ministers, organizing a local river clean-up project and writing to the United Nations about climate change, are just some of the activities learners are pursuing through the Cambridge IGCSE Global Perspectives course.

Cambridge IGCSE Global Perspectives is a groundbreaking and stimulating course that stretches across traditional subject boundaries and develops transferable skills. It is both cross-curricular and skills-based and taps into the way learners of today enjoy learning, including team work, presentations, projects, and working with other learners around the world. The emphasis is on developing the ability to think critically about a range of global issues where there is always more than one point of view.

#### Mathematics - 0580

An essential subject for all learners, Cambridge IGCSE Mathematics encourages the development of mathematical knowledge as a key life skill, and as a strong basis for more advanced study. The syllabus aims to build learners' confidence by helping them develop competence and fluency with mathematical concepts, methods and skills, as well as a feel for numbers, patterns and relationships. The syllabus also places a strong emphasis on solving problems and presenting and interpreting results. Learners also gain an understanding of how to communicate and reason using mathematical concepts.

#### Mathematics - Additional - 0606

Cambridge IGCSE Additional Mathematics supports learners in building competency, confidence and fluency in their use of techniques and mathematical understanding. This course helps learners to develop a feel for quantity, patterns and relationships. Learners will develop their reasoning, problem-solving and analytical skills in a variety of contexts.

It provides a strong foundation of mathematical knowledge both for candidates studying mathematics at a higher level and those who will require mathematics to support skills in other subjects. It is designed to stretch the most able candidates and provides a smooth transition to Cambridge AS & A-Level Mathematics.

#### Music - 0410

When studying the Cambridge IGCSE Music syllabus, learners listen to, perform and compose music, encouraging aesthetic and emotional development, self-discipline and, importantly, creativity. As a result, learners enhance their appreciation and enjoyment of music, an achievement that forms an ideal foundation for future study and enhances life-long musical enjoyment.

Learners study music of all styles; each style is placed in its historical and cultural context, and they are encouraged to be perceptive, sensitive and critical when listening. Although the majority of the syllabus examines Western European music, the music of other cultures is always represented.

### Physical Education – 0413

The syllabus provides learners with an opportunity to study both the practical and theoretical aspects of physical education. It is designed to encourage enjoyment in physical activity by providing learners with an opportunity to take part in a range of physical activities and develop an understanding of effective and safe physical performance. This helps learners to develop an appreciation of the necessity for sound understanding of the principles, practices and training that underpin improved performance, better health and well-being.

### Physics - 0625

Cambridge IGCSE Physics helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments. The syllabus includes the basic principles and concepts that are fundamental to the subject, some current applications of physics, and a strong emphasis on practical skills.

Learners also develop an understanding of the scientific skills essential for progression to Cambridge International AS & A-Level, further education or a career related to science.

#### Science - Co-ordinated (Double) - 0654

Cambridge IGCSE Co-ordinated Sciences gives learners the opportunity to study Biology, Chemistry and Physics within a cross-referenced, scientifically coherent syllabus. It is a double award qualification, earning two grades. Learners gain an understanding of the basic principles of each subject through a mix of theoretical and practical studies, while also developing an understanding of the scientific skills essential for further study.

They learn how science is studied and practiced, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment. As well as focusing on the individual sciences, the syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments.

### >> IBDP开设科目简介(英)IBDP Subject Brief

# **IBDP Subject Brief**

(offered in Shanghai Hongwen 2021 - 2022)

### Language A: language and literature (SL/HL)

The language A: language and literature course aims at studying the complex and dynamic nature of language and exploring both its practical and aesthetic dimensions. The course will explore the crucial role language plays in communication, reflecting experience and shaping the world, and the roles of individuals themselves as producers of language. Throughout the course, students will explore the various ways in which language choices, text types, literary forms and contextual elements all affect meaning. Through close analysis of various text types and literary forms, students will consider their own interpretations, as well as the critical perspectives of others, to explore how such positions are shaped by cultural belief systems and to negotiate meanings for texts.

#### Language B (SL/HL)

Language acquisition consists of two modern language courses— language ab initio and language B—designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken.

Language B is a language acquisition course designed for students with some previous experience of the target language. Students further develop their ability to communicate through the study of language, themes and texts. There are five prescribed themes: identities, experiences, human ingenuity, social organization and sharing the planet.

Both language B SL and HL students learn to communicate in the target language in familiar and unfamiliar contexts. The distinction between language B SL and HL can be seen in the level of competency the student is expected to develop in receptive, productive and interactive skills.

At HL the study of two literary works originally written in the target language is required and students are expected to extend the range and complexity of the language they use and understand in order to communicate. Students continue to develop their knowledge of vocabulary and grammar, as well as their conceptual understanding of how language works, in order to construct, analyze and evaluate arguments on a variety of topics relating to course content and the target language culture(s).

#### Individuals and societies: Economics (SL/HL)

Economics is an exciting, dynamic subject that allows students to develop an understanding of the complexities and interdependence of economic activities in a rapidly changing world. At the heart of economic theory is the problem of scarcity. Owing to scarcity, choices have to be made. The economics course, at both SL and HL, uses economic theories, models and key concepts to examine the ways in which these choices are made: at the level of producers and consumers in individual markets (microeconomics); at the level of the government and the national economy (macroeconomics); and at an international level, where countries are becoming increasingly interdependent (the global economy). The DP economics

course allows students to explore these models, theories and key concepts, and apply them, using empirical data, through the examination of six real-world issues. Through their own inquiry, students will be able to appreciate both the values and limitations of economic models in explaining real-world economic behavior and outcomes. By focusing on the six real-world issues through the nine key concepts (scarcity, choice, efficiency, equity, economic well-being, sustainability, change, interdependence and intervention), students of the economics course will develop the knowledge, skills, values and attitudes that will encourage them to act responsibly as global citizens.

### Individuals and societies: Psychology (SL)

At the core of the DP psychology course is an introduction to three different approaches to understanding behavior: the biological, cognitive and sociocultural approaches. Students study and critically evaluate the knowledge, concepts, theories and research that have developed the understanding in these fields.

The interaction of these approaches to studying psychology forms the basis of a holistic and integrated approach to understanding mental processes and behavior as a complex, dynamic phenomenon, allowing students to appreciate the diversity as well as the commonality between their own behavior and that of others.

The contribution and the interaction of the three approaches are understood through the four options in the course, focusing on areas of applied psychology: abnormal psychology, developmental psychology, health psychology, and the psychology of relationships. The options provide an opportunity to take what is learned from the study of the approaches to psychology and apply it to specific lines of inquiry.

Psychologists employ a range of research methods, both qualitative and quantitative, to test their observations and hypotheses. DP psychology promotes an understanding of the various approaches to research and how they are used to critically reflect on the evidence as well as assist in the design, implementation, analysis and evaluation of the students' own investigations. Surrounding the approaches and the options are the overarching themes of research and ethics. A consideration of both is paramount to the nature of the subject.

#### Sciences: Biology (SL/HL)

Biology is the study of life. The vast diversity of species makes biology both an endless source of fascination and a considerable challenge. Biologists attempt to understand the living world at all levels from the micro to the macro using many different approaches and techniques. Biology is still a young science and great progress is expected in the 21st century. This progress is important at a time of growing pressure on the human population and the environment.

By studying biology in the DP students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the sciences. Teachers provide students with opportunities to design investigations, collect data, develop manipulative skills, analyze results, collaborate with peers and evaluate and communicate their findings.

#### Sciences: Chemistry (SL/HL)

Chemistry is an experimental science that combines academic study with the acquisition of practical and investigational skills. Chemical principles underpin both the physical environment in which we live and all biological systems. Chemistry is often a prerequisite for many other courses in higher education, such as medicine, biological science and environmental science.

Both theory and practical work should be undertaken by all students as they complement one another naturally, both in school and in the wider scientific community. The DP chemistry course allows students to develop a wide range of practical skills and to increase facility in the use of mathematics. It also allows students to develop interpersonal and information technology skills, which are essential to life in the 21st century.

By studying chemistry students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the subject. Teachers provide students with opportunities to develop manipulative skills, design investigations, collect data, analyze results and evaluate and communicate their findings.

### Sciences: Physics (SL/HL)

Physics is the most fundamental of the experimental sciences, as it seeks to explain the universe itself, from the very smallest particles to the vast distances between galaxies. Despite the exciting and extraordinary development of ideas throughout the history of physics, observations remain essential to the very core of the subject. Models are developed to try to understand observations, and these themselves can become theories that attempt to explain the observations.

Besides helping us better understand the natural world, physics gives us the ability to alter our environments. This raises the issue of the impact of physics on society, the moral and ethical dilemmas, and the social, economic and environmental implications of the work of physicists.

By studying physics students should become aware of how scientists work and communicate with each other. While the scientific method may take on a wide variety of forms, it is the emphasis on a practical approach through experimental work that characterizes the subject. Teachers provide students with opportunities to develop manipulative skills, design investigations, collect data, analyze results and evaluate and communicate their findings.

#### Sciences: Computer Science (SL/HL)

The IB DP computer science course requires an understanding of the fundamental concepts of computational thinking as well as knowledge of how computers and other digital devices operate. The course, underpinned by conceptual thinking, draws on a wide spectrum of knowledge, and enables and empowers innovation, exploration and the acquisition of further knowledge. Students study how computer science interacts with and influences cultures, society and how individuals and societies behave, and the ethical issues involved. During the course the student will develop computational solutions. This will involve the ability to: identify a problem or unanswered question; design, prototype and test a proposed solution; liaise with clients to evaluate the success of the proposed solution and make recommendations for future developments.

### Mathematics: Mathematics (SL/HL)

The IB DP mathematics SL course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on the mathematical rigor required for mathematics HL. Students should, wherever possible, apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context.

The internally assessed exploration offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

The HL mathematics course focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way, achieved by a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. Development of each topic should feature justification and proof of results. Students should expect to develop insight into mathematical form and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. They are also encouraged to develop the skills needed to continue their mathematical growth in other learning environments. The internally assessed exploration allows students to develop independence in mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas.

#### The arts: Music (SL/HL)

The Diploma Programme Music course (for first teaching from 2020) has been designed to prepare the 21st century music student for a world in which global musical cultures and industries are rapidly changing. The course is grounded in the knowledge, skills and processes associated with the study of music and offers a strengthened approach to student creativity through practical, informed and purposeful explorations of diverse musical forms, practices and contexts. The course also ensures a holistic approach to learning, with the roles of performer, creator and researcher afforded equal importance in all course components.

#### The arts: Visual arts (SL/HL)

The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking, while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to go on to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

The role of visual arts teachers should be to actively and carefully organize learning experiences for the students, directing their study to enable them to reach their potential and satisfy the demands of the course. Students should be empowered to become autonomous, informed and skilled visual artists.

#### The arts: Theatre (SL)

Theatre is a practical subject that encourages discovery through experimentation, risk-taking and the presentation of ideas. The IB DP theatre course is multifaceted and gives students the opportunity to actively engage in theatre as creators, designers, directors and performers. It emphasizes working both individually and collaboratively as part of an ensemble. The teacher's role is to create opportunities that allow students to explore, learn, discover and collaborate to become autonomous, informed and skilled theatre-makers.

Students learn to apply research and theory to inform and to contextualize their work. Through researching, creating, preparing, presenting and critically reflecting on theatre, they gain a richer understanding of themselves, their community and the world. Students experience the course from contrasting artistic and cultural perspectives. They learn about theatre from around the world, the importance of making theatre with integrity, and the impact that theatre can have on the world. It enables them to discover and engage with different forms of theatre across time, place and culture, promoting international-mindedness and an appreciation of the diversity of theatre.

### Diploma Programme core: Theory of knowledge

The theory of knowledge (TOK) course plays a special role in the DP by providing an opportunity for students to reflect on the nature, scope and limitations of knowledge and the process of knowing. In this way, the main focus of TOK is not on students acquiring new knowledge but on helping students to reflect on, and put into perspective, what they already know. TOK underpins and helps to unite the subjects that students encounter in the rest of their DP studies. It engages students in explicit reflection on how knowledge is arrived at in different disciplines and areas of knowledge, on what these areas have in common and the differences between them.

The aims of the TOK course are:

- to encourage students to reflect on the central question, "How do we know that?", and to recognize the value of asking that question
- · to expose students to ambiguity, uncertainty and questions with multiple plausible answers
- $\cdot$  to equip students to effectively navigate and make sense of the world, and help prepare them to encounter novel and complex situations
- · to encourage students to be more aware of their own perspectives and to reflect critically on their own beliefs and assumptions
- · to engage students with multiple perspectives, foster open-mindedness and develop intercultural understanding
- · to encourage students to make connections between academic disciplines by exploring underlying concepts and by identifying similarities and differences in the methods of inquiry used in different areas of knowledge
- · to prompt students to consider the importance of values, responsibilities and ethical concerns relating to the production, acquisition, application and communication of knowledge.

#### Diploma Programme Core: Extended essay

The extended essay is a compulsory, externally assessed piece of independent research into a topic chosen by the student and presented as a formal piece of academic writing. The extended essay is intended to promote high-level research and writing skills, intellectual discovery and creativity while engaging students in personal research. This leads to a major piece of formally presented, structured writing of up to 4,000 words in which ideas and findings are communicated in a reasoned, coherent and appropriate manner.

Students are guided through the process of research and writing by an assigned supervisor (a teacher in the school). All students undertake three mandatory reflection sessions with their supervisor, including a short interview, or viva voce, following the completion of the extended essay.

Extended essay topics may be chosen from a list of approved DP subjects—normally one of the student's six chosen subjects for the IB diploma or the world studies option. World studies provides students with the opportunity to carry out an in-depth interdisciplinary study of an issue of contemporary global significance, using two IB disciplines.

The aims of the extended essay are to provide students with the opportunity to:

- · engage in independent research with intellectual initiative and rigour
- · develop research, thinking, self-management and communication skills
- · reflect on what has been learned throughout the research and writing process.

### Diploma Programme core: Creativity, activity, service

Creativity, activity, service (CAS) is at the heart of the DP. With its holistic approach, CAS is designed to strengthen and extend students' personal and interpersonal learning from the Primary Years Programme (PYP) and Middle Years Programme (MYP).

CAS is organized around the three strands of creativity, activity and service defined as follows.

- · Creativity—exploring and extending ideas leading to an original or interpretive product or performance.
- · Activity—physical exertion contributing to a healthy lifestyle.
- · Service—collaborative and reciprocal engagement with the community in response to an authentic need.

CAS aims to develop students who:

- · enjoy and find significance in a range of CAS experiences
- · purposefully reflect upon their experiences
- · identify goals, develop strategies and determine further actions for personal growth
- · explore new possibilities, embrace new challenges and adapt to new roles
- · actively participate in planned, sustained and collaborative CAS projects
- · understand they are members of local and global communities with responsibilities towards each other and the environment.

A CAS experience is a specific event in which the student engages with one or more of the three CAS strands. It can be a single event or an extended series of events. A CAS project is a collaborative series of sequential CAS experiences lasting at least one month. Typically, a student's CAS programme combines planned/unplanned singular and ongoing experiences. All are valuable and may lead to personal development. However, a meaningful CAS programme must be more than just a series of unplanned/singular experiences. Students must be involved in at least one CAS project during the programme.

### >> AS & A-Level开设科目简介(英) AS & A-Level Subject Brief

# **CAIE AS & A-Level Subject Brief**

(offered in Shanghai Hongwen 2021 - 2022)

### Art & Design - 9479

The Cambridge International A-Level Art and Design syllabus considers expression and communication. Learners gain an understanding of visual perception and aesthetic experience, and the ways in which art and design creates a language of its own.

Most of the work for this syllabus is practical or studio based, so that learners can develop their abilities of observation and analysis of the visual world, sensitivity, skill, personal expression and imagination. They also learn how to relate their skills to an enhanced knowledge of their own cultures, past and present, as well as an appreciation of practical design problems.

### Biology - 9700

Cambridge International AS and A-Level Biology builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, some current applications of biology, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of biology ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A-Level Biology are ideal for learners who want to study biology or a wide variety of related subjects at university or to follow a career in science.

#### Business - 9609

The syllabus enables students to understand and appreciate the nature and scope of business, and the role it plays in society. It encourages students to examine the process of decision-making in a dynamic and changing business environment and to develop critical understanding of business organizations. They learn about business and its environment, human resource management, marketing, operations management and finance and accounting. At Cambridge International A-Level, students also learn how to develop a business strategy.

#### Chemistry - 9701

Cambridge International AS and A-Level Chemistry builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, some current applications of chemistry, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of chemistry ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A-Level Chemistry are ideal for learners who want to study chemistry or a wide variety of related subjects at university or to follow a career in science.

### Chinese (A-Level only) – 9715

Cambridge International A-Level Chinese builds on the language skills gained at Cambridge IGCSE, Cambridge O Level or Cambridge International AS Level, and is the ideal foundation for university-level study, or to improve career prospects.

Learners gain an understanding of how to use the language in a variety of situations. They will be expected to handle texts and other source materials, extracting information in order to respond to specific tasks. Through their studies, learners can expect to achieve greater fluency, accuracy and confidence in the language. They will also learn how to translate material from English into the Chinese.

### Computer Science - 9618

Cambridge International AS & A-Level Computer Science encourages learners to meet the needs of higher education courses in computer science as well as twenty-first century digital employers. It encourages leaders to think creatively, through applying practical programming solutions, demonstrating that they are effective uses of technology.

Learners develop computational thinking & programming skills to solve computer science problems. Cambridge International AS and A-Level Computer Science will help learners develop a range of skills such as thinking creatively, analytically, logically and critically. They will also be able to appreciate the ethical issues that arise with current and emerging computing technologies.

### Digital Media & Design - 9481

Cambridge International AS & A-Level Digital Media & Design is a new addition to the Cambridge International creative subject suite.

This syllabus is for learners who want to explore a range of processes and techniques in digital media. The subject content is grouped into three broad areas of study; digital photography, moving image through film and animation, and mobile and multimedia applications including games design. You can structure a course around a single area of study or create a course that includes a combination of two or three areas of study.

Cambridge International AS & A-Level Digital Media & Design helps learners develop the knowledge and skills that will prepare them for further study and to work in a collaborative industry. They will develop an awareness of the world of digital media and design and the factors and contexts that influence it. Learners will:

- · develop creative processes and the ability to critically evaluate their work to continually review and refine ideas
- · learn how to combine innovative approaches and techniques to solve problems creatively
- · expand their knowledge of digital media by exploring different designers, processes and concepts.

#### Drama - 9482

Cambridge International AS & A-Level Drama encourages learners to develop their skills in performing, devising and researching a wide range of theatrical styles and genres. They learn to communicate with an audience through practical and creative work on performance texts and their own devised material, both as individuals and in groups. Underpinned by theoretical and practical study, they learn to research, analyze, create and interpret, and to become skilled, well-informed and reflective theatrical practitioners who enjoy drama.

Cambridge International AS & A-Level Drama provides a foundation for the further study of drama or related courses in higher education.

#### Economics - 9708

Students learn how to explain and analyze economic issues and arguments, evaluate economic information, and organize, present and communicate ideas and judgements clearly.

The syllabus covers a range of fundamental economic ideas, including an introduction to the price system and government intervention, international trade and exchange rates, the measurement of employment and inflation, and the causes and consequences of inflation. Students also study the theory of the firm, market failure, macroeconomic theory and policy, and economic growth and development.

#### Global Perspectives & Research - 9239

Cambridge International AS & A-Level Global Perspectives and Research is a skills-based course that prepares learners for positive engagement with our rapidly changing world. Learners broaden their outlook through the critical analysis of – and reflection on – issues of global significance. They will develop unique, transferable skills including research, critical thinking and communication by following an approach to analyzing and evaluating arguments and perspectives called the 'Critical Path'.

Collaborative skills are enhanced through participation in a team project. The skills gained through study of this course help students to meet the demands of Twenty-First century learning, preparing the transition to higher education and the world of work.

As part of the course learners write a research report on a research question of their choice. You can find out more information on this on the School Support Hub and viewing the supporting documents.

#### Mathematics - 9709

Cambridge International A-Level Mathematics develops a set of transferable skills. These include the skill of working with mathematical information, as well as the ability to think logically and independently, consider accuracy, model situations mathematically, analyze results and reflect on findings.

Learners can apply these skills across a wide range of subjects and these skills equip them well for progression to higher education or directly into employment.

At AS level, teachers can choose from three different routes to Cambridge International AS Level Mathematics: Pure Mathematics only, Pure Mathematics and Mechanics, or Pure Mathematics and Probability & Statistics.

At A-Level, teachers can also choose from different routes to Cambridge International A-Level Mathematics depending on the choice of applied mathematics (Mechanics and/or Probability and Statistics).

Please note: From 2020 Cambridge International A-Level Mathematics has two different routes: Pure Mathematics and Probability & Statistics only; or Pure Mathematics, Mechanics and Probability & Statistics.

#### Mathematics - Further - 9231

Cambridge International A-Level Further Mathematics develops and extends a set of transferable skills. These include the skill of working with mathematical information, as well as the ability to think logically and independently, consider accuracy, model situations mathematically, analyze results and reflect on findings.

Learners can apply these skills across a wide range of subjects and these skills equip them well for progression to higher education or directly into employment. Some universities prefer applicants for degrees in mathematics and mathematical/scientific subjects to have an AS or A-Level Further Mathematics or equivalent qualification.

This syllabus is intended for high ability learners who have achieved, or are likely to achieve, a high grade in the Cambridge International A-Level Mathematics examination. Knowledge of the whole content of the Cambridge International A-Level Mathematics syllabus is assumed. Learners will find that the additional time spent studying Further Mathematics will support their understanding of A-Level Mathematics.

Please note: From 2020 Cambridge International AS Level Further Mathematics is available. The AS Level can be taken at the halfway point in an A-Level or as a stand-alone qualification. The AS Level allows a choice of applied mathematics: all candidates study Further Pure Mathematics 1 and choose from either Further Probability & Statistics or Further Mechanics.

#### Music - 9483

Cambridge International AS and A-Level Music encourage learners to develop their musical skills in a variety of music styles and traditions and build on their musical interests. Learners are encouraged to listen, compose and perform with understanding, analysis and confident communication. They learn to become independent and critical thinkers.

Cambridge International AS and A-Level Music provide a foundation for the study of music or related courses in higher education.

# Physical Education – 9396

The Physical Education syllabus is both practical and theoretical, covering anatomy and physiology, movement skills and contemporary studies in sport. Learners are encouraged to try out a range of physical activities, including team and individual sports, games, and outdoor activities, and then use the theoretical knowledge they have gained to analyze the different factors influencing performance.

We are withdrawing Cambridge International AS & A-Level Physical Education (9396). The final examination for this syllabus at both AS and A-Level will be November 2023.

We will continue to provide an engaging and high-quality syllabus at AS Level in Physical Education. In September 2021 we will publish a new AS-only syllabus in Physical Education for first examination in June 2024. This syllabus (8386) will be available in the June and November exam series.

#### Physics – 9702

Cambridge International AS and A-Level Physics builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, some current applications of physics, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of physics ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A-Level Physics are ideal for learners who want to study physics or a wide variety of related subjects at university or to follow a career in science.

# >> 各科公式表与额外信息 Subject Formulae Tables and additional information

## > 数学 Mathematics

#### **Command words**

The table below includes command words used in the assessment for this syllabus. The use of the command word will relate to the subject context.

Command word	What it means
Calculate	work out from given facts, figures or information
Describe	state the points of a topic / give characteristics and main features
Determine	establish with certainty
Evaluate	judge or calculate the quality, importance, amount, or value of something
Explain	set out purposes or reasons / make the relationships between things evident / provide why and/or how and support with relevant evidence
Identify	name/select/recognise
Justify	support a case with evidence/argument
Show (that)	provide structured evidence that leads to a given result
Sketch	make a simple freehand drawing showing the key features
State	express in clear terms
Verify	confirm a given statement/result is true

# 5 List of formulae and statistical tables (MF19)

#### PURE MATHEMATICS

Mensuration

Volume of sphere =  $\frac{4}{3}\pi r^3$ 

Surface area of sphere =  $4\pi r^2$ 

Volume of cone or pyramid =  $\frac{1}{2} \times \text{base area} \times \text{height}$ 

Area of curved surface of cone =  $\pi r \times \text{slant height}$ 

Arc length of circle =  $r\theta$  ( $\theta$  in radians)

Area of sector of circle  $=\frac{1}{2}r^2\theta$  ( $\theta$  in radians)

Algebra

For the quadratic equation  $ax^2 + bx + c = 0$ :

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

For an arithmetic series:

$$u_n = a + (n-1)d$$
,  $S_n = \frac{1}{2}n(a+1) = \frac{1}{2}n\{2a + (n-1)d\}$ 

For a geometric series:

$$u_n = ar^{n-1},$$
  $S_n = \frac{a(1-r^n)}{1-r} \quad (r \neq 1),$   $S_{\infty} = \frac{a}{1-r} \quad (|r| < 1)$ 

Binomial series:

$$(a+b)^n = a^n + \binom{n}{1} a^{n-1}b + \binom{n}{2} a^{n-2}b^2 + \binom{n}{3} a^{n-3}b^3 + \dots + b^n$$
, where  $n$  is a positive integer and  $\binom{n}{r} = \frac{n!}{r!(n-r)!}$ 

$$(1+x)^n = 1 + nx + \frac{n(n-1)}{2!}x^2 + \frac{n(n-1)(n-2)}{3!}x^3 + \dots$$
, where *n* is rational and  $|x| < 1$ 

Trigonometry

$$\tan \theta = \frac{\sin \theta}{\cos \theta}$$

 $\cos^2\theta + \sin^2\theta \equiv 1$ ,

$$1 + \tan^2 \theta = \sec^2 \theta$$
,

 $\cot^2 \theta + 1 \equiv \csc^2 \theta$ 

 $\sin(A \pm B) \equiv \sin A \cos B \pm \cos A \sin B$ 

 $cos(A \pm B) \equiv cos A cos B \mp sin A sin B$ 

$$\tan(A \pm B) = \frac{\tan A \pm \tan B}{1 \mp \tan A \tan B}$$

 $\sin 2A = 2\sin A\cos A$ 

$$\cos 2A = \cos^2 A - \sin^2 A = 2\cos^2 A - 1 = 1 - 2\sin^2 A$$

$$\tan 2A = \frac{2\tan A}{1 - \tan^2 A}$$

Principal values:

$$-\frac{1}{2}\pi \leqslant \sin^{-1}x \leqslant \frac{1}{2}\pi$$
,  $0 \leqslant \cos^{-1}x \leqslant \pi$ ,  $-\frac{1}{2}\pi < \tan^{-1}x < \frac{1}{2}\pi$ 

$$0 \le \cos^{-1} x \le 1$$

$$-\frac{1}{2}\pi < \tan^{-1}x < \frac{1}{2}\pi$$

Differentiation

 $x^n$ 

$$f'(x)$$
 $nx^{n-1}$ 

$$\ln x$$

 $sec^2 x$ 

 $-\csc^2 x$ 

$$\sin x$$

$$\cos x$$

$$-\sin x$$

tan x

$$\csc x$$
  $-\csc x \cot x$ 

$$\tan^{-1} x$$

$$v \frac{du}{dt} + u$$

$$\frac{v\frac{du}{dx} - u\frac{dv}{dx}}{v^2}$$

If 
$$x = f(t)$$
 and  $y = g(t)$  then  $\frac{dy}{dx} = \frac{dy}{dt} \div \frac{dx}{dt}$ 

#### Integration

(Arbitrary constants are omitted; a denotes a positive constant.)

f(x)	$\int f(x)  \mathrm{d}x$	
<i>x</i> "	$\frac{x^{n+1}}{n+1}$	$(n \neq -1)$
$\frac{1}{x}$	$\ln  x $	
$e^x$	e <sup>x</sup>	
$\sin x$	$-\cos x$	
$\cos x$	$\sin x$	
$\sec^2 x$	tan x	
$\frac{1}{x^2 + a^2}$	$\frac{1}{a} \tan^{-1} \left( \frac{x}{a} \right)$	
$\frac{1}{x^2 - a^2}$	$\frac{1}{2a}\ln\left \frac{x-a}{x+a}\right $	(x>a)
$\frac{1}{a^2 - x^2}$	$\frac{1}{2a}\ln\left \frac{a+x}{a-x}\right $	( x  < a)
$\int u \frac{\mathrm{d}v}{\mathrm{d}x} \mathrm{d}x = uv - \int v \frac{\mathrm{d}u}{\mathrm{d}x} \mathrm{d}x$		
$\int \frac{\mathbf{f}'(x)}{\mathbf{f}(x)}  \mathrm{d}x = \ln \left  \mathbf{f}(x) \right $		

#### Vectors

If  $\mathbf{a} = a_1 \mathbf{i} + a_2 \mathbf{j} + a_3 \mathbf{k}$  and  $\mathbf{b} = b_1 \mathbf{i} + b_2 \mathbf{j} + b_3 \mathbf{k}$  then

$$\mathbf{a}.\mathbf{b} = a_1b_1 + a_2b_2 + a_3b_3 = |\mathbf{a}| |\mathbf{b}| \cos\theta$$

#### FURTHER PURE MATHEMATICS

Algebra

Summations

$$\sum_{r=1}^{n} r = \frac{1}{2} n(n+1), \qquad \sum_{r=1}^{n} r^2 = \frac{1}{6} n(n+1)(2n+1), \qquad \sum_{r=1}^{n} r^3 = \frac{1}{4} n^2 (n+1)^2$$

Maclaurin's series:

$$f(x) = f(0) + x f'(0) + \frac{x^2}{2!} f''(0) + \dots + \frac{x^r}{r!} f^{(r)}(0) + \dots$$

$$e^x = \exp(x) = 1 + x + \frac{x^2}{2!} + \dots + \frac{x^r}{r!} + \dots$$
 (all x)

$$\ln(1+x) = x - \frac{x^2}{2} + \frac{x^3}{3} - \dots + (-1)^{r+1} \frac{x^r}{r} + \dots$$
 (-1 < x \le 1)

$$\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \dots + (-1)^r \frac{x^{2r+1}}{(2r+1)!} + \dots$$
 (all x)

$$\cos x = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \dots + (-1)^r \frac{x^{2r}}{(2r)!} + \dots$$
 (all x)

$$\tan^{-1} x = x - \frac{x^3}{3} + \frac{x^5}{5} - \dots + (-1)^r \frac{x^{2r+1}}{2r+1} + \dots$$
 (-1 \le x \le 1)

$$\sinh x = x + \frac{x^3}{3!} + \frac{x^5}{5!} + \dots + \frac{x^{2r+1}}{(2r+1)!} + \dots$$
 (all x)

$$\cosh x = 1 + \frac{x^2}{2!} + \frac{x^4}{4!} + \dots + \frac{x^{2r}}{(2r)!} + \dots$$
 (all x)

$$\tanh^{-1} x = x + \frac{x^3}{3} + \frac{x^5}{5} + \dots + \frac{x^{2r+1}}{2r+1} + \dots$$
 (-1 < x < 1)

Trigonometry

If  $t = \tan \frac{1}{2}x$  then:

$$\sin x = \frac{2t}{1+t^2}$$
 and  $\cos x = \frac{1-t^2}{1+t^2}$ 

Hyperbolic functions

$$\cosh^{2} x - \sinh^{2} x \equiv 1, \qquad \sinh 2x \equiv 2\sinh x \cosh x, \qquad \cosh 2x \equiv \cosh^{2} x + \sinh^{2} x$$

$$\sinh^{-1} x = \ln(x + \sqrt{x^{2} + 1})$$

$$\cosh^{-1} x = \ln(x + \sqrt{x^{2} - 1}) \qquad (x \geqslant 1)$$

$$\tanh^{-1} x = \frac{1}{2} \ln\left(\frac{1 + x}{1 - x}\right) \qquad (|x| < 1)$$

#### Differentiation

$$f(x) \qquad f'(x)$$

$$\sin^{-1} x \qquad \frac{1}{\sqrt{1-x^2}}$$

$$\cos^{-1} x \qquad -\frac{1}{\sqrt{1-x^2}}$$

$$\sinh x \qquad \cosh x$$

$$\tanh x \qquad \sinh x$$

$$\tanh^{-1} x \qquad \frac{1}{\sqrt{1+x^2}}$$

$$\tanh^{-1} x \qquad \frac{1}{1-x^2}$$

#### Integration

(Arbitrary constants are omitted; a denotes a positive constant.)

$$f(x) \qquad \int f(x) dx$$

$$\sec x \qquad \ln|\sec x + \tan x| = \ln|\tan(\frac{1}{2}x + \frac{1}{4}\pi)| \qquad (|x| < \frac{1}{2}\pi)$$

$$\csc x \qquad -\ln|\csc x + \cot x| = \ln|\tan(\frac{1}{2}x)| \qquad (0 < x < \pi)$$

$$\sinh x \qquad \cosh x$$

$$\cosh x \qquad \sinh x$$

$$\operatorname{sech}^{2} x \qquad \tanh x$$

$$\frac{1}{\sqrt{a^{2} - x^{2}}} \qquad \sin^{-1}\left(\frac{x}{a}\right) \qquad (|x| < a)$$

$$\frac{1}{\sqrt{x^{2} - a^{2}}} \qquad \cosh^{-1}\left(\frac{x}{a}\right) \qquad (x > a)$$

$$\frac{1}{\sqrt{a^{2} + x^{2}}} \qquad \sinh^{-1}\left(\frac{x}{a}\right)$$

#### MECHANICS

Uniformly accelerated motion

$$v = u + at$$
,  $s = \frac{1}{2}(u + v)t$ ,  $s = ut + \frac{1}{2}at^2$ ,  $v^2 = u^2 + 2as$ 

#### FURTHER MECHANICS

Motion of a projectile

Equation of trajectory is:

$$y = x \tan \theta - \frac{gx^2}{2V^2 \cos^2 \theta}$$

Elastic strings and springs

$$T = \frac{\lambda x}{I}$$
,

$$E = \frac{\lambda x^2}{2l}$$

Motion in a circle

For uniform circular motion, the acceleration is directed towards the centre and has magnitude

$$\omega^2 r$$
 or  $\frac{v^2}{r}$ 

Centres of mass of uniform bodies

Triangular lamina: 2/3 along median from vertex

Solid hemisphere of radius r:  $\frac{3}{8}r$  from centre

Hemispherical shell of radius r:  $\frac{1}{3}r$  from centre

Circular arc of radius r and angle  $2\alpha$ :  $\frac{r \sin \alpha}{\alpha}$  from centre

Circular sector of radius r and angle  $2\alpha$ :  $\frac{2r\sin\alpha}{3\alpha}$  from centre

Solid cone or pyramid of height  $h: \frac{3}{4}h$  from vertex

#### PROBABILITY & STATISTICS

Summary statistics

For ungrouped data:

$$\overline{x} = \frac{\sum x}{n}$$
, standard deviation  $= \sqrt{\frac{\sum (x - \overline{x})^2}{n}} = \sqrt{\frac{\sum x^2}{n} - \overline{x}^2}$ 

For grouped data:

$$\overline{x} = \frac{\sum xf}{\sum f}$$
, standard deviation  $= \sqrt{\frac{\sum (x - \overline{x})^2 f}{\sum f}} = \sqrt{\frac{\sum x^2 f}{\sum f} - \overline{x}^2}$ 

Discrete random variables

$$E(X) = \sum xp$$
,  $Var(X) = \sum x^2 p - \{E(X)\}^2$ 

For the binomial distribution B(n, p):

$$p_r = \binom{n}{r} p^r (1-p)^{n-r}, \qquad \mu = np, \qquad \sigma^2 = np(1-p)$$

For the geometric distribution Geo(p):

$$p_r = p(1-p)^{r-1}, \qquad \mu = \frac{1}{p}$$

For the Poisson distribution  $Po(\lambda)$ 

$$p_r = e^{-\lambda} \frac{\lambda^r}{r!}, \qquad \mu = \lambda, \qquad \sigma^2 = \lambda$$

Continuous random variables

$$E(X) = \int x f(x) dx$$
,  $Var(X) = \int x^2 f(x) dx - \{E(X)\}^2$ 

Sampling and testing

Unbiased estimators:

$$\overline{x} = \frac{\sum x}{n}$$
,  $s^2 = \frac{\sum (x - \overline{x})^2}{n - 1} = \frac{1}{n - 1} \left( \sum x^2 - \frac{(\sum x)^2}{n} \right)$ 

Central Limit Theorem:

$$\overline{X} \sim N\left(\mu, \frac{\sigma^2}{n}\right)$$

Approximate distribution of sample proportion:

$$N\left(p, \frac{p(1-p)}{n}\right)$$

#### FURTHER PROBABILITY & STATISTICS

Sampling and testing

Two-sample estimate of a common variance:

$$s^{2} = \frac{\sum (x_{1} - \overline{x}_{1})^{2} + \sum (x_{2} - \overline{x}_{2})^{2}}{n_{1} + n_{2} - 2}$$

Probability generating functions

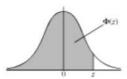
$$G_X(t) = E(t^X)$$
,  $E(X) = G_X'(1)$ ,  $Var(X) = G_X''(1) + G_X'(1) - \{G_X'(1)\}^2$ 

#### THE NORMAL DISTRIBUTION FUNCTION

If Z has a normal distribution with mean 0 and variance 1, then, for each value of z, the table gives the value of  $\Phi(z)$ , where



For negative values of z, use  $\Phi(-z) = 1 - \Phi(z)$ .



	0	-1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
z	0		2	3		3	0		0	9					ADE	)			
0.0	0.5000	0.5040	0.5080	0.5120	0.5160	0.5199	0.5239	0.5279	0.5319	0.5359	4	8	12	16	20	24	28	32	3
0.1	0.5398	0.5438	0.5478	0.5517	0.5557	0.5596	0.5636	0.5675	0.5714	0.5753	4	8	12	16	20	24	28	32	3
0.2	0.5793	0.5832	0.5871	0.5910	0.5948	0.5987	0.6026	0.6064	0.6103	0.6141	4	8	12	15	19	23	27	31	3
0.3	0.6179	0.6217	0.6255	0.6293	0.6331	0.6368	0.6406	0.6443	0.6480	0.6517	4	7	11	15	19	22	26	30	3
0.4	0.6554	0.6591	0.6628	0.6664	0.6700	0.6736	0.6772	0.6808	0.6844	0.6879	4	7	11	14	18	22	25	29	3
0.5	0.6915	0.6950	0.6985	0.7019	0.7054	0.7088	0.7123	0.7157	0.7190	0.7224	3	7	10	14	17	20	24	27	3
0.6	0.7257	0.7291	0.7324	0.7357	0.7389	0.7422	0.7454	0.7486	0.7517	0.7549	3	7	10	13	16	19	23	26	-
0.7	0.7580	0.7611	0.7642	0.7673	0.7704	0.7734	0.7764	0.7794	0.7823	0.7852	3	6	9	12	15	18	21	24	1
8.0	0.7881	0.7910	0.7939	0.7967	0.7995	0.8023	0.8051	0.8078	0.8106	0.8133	3	5	8	11	14	16	19	22	1
0.9	0.8159	0.8186	0.8212	0.8238	0.8264	0.8289	0.8315	0.8340	0.8365	0.8389	3	5	8	10	13	15	18	20	2
1.0	0.8413	0.8438	0.8461	0.8485	0.8508	0.8531	0.8554	0.8577	0.8599	0.8621	2	5	7	9	12	14	16	19	
1.1	0.8643	0.8665	0.8686	0.8708	0.8729	0.8749	0.8770	0.8790	0.8810	0.8830	2	4	6	8	10	12	14	16	
1.2	0.8849	0.8869	0.8888	0.8907	0.8925	0.8944	0.8962	0.8980	0.8997	0.9015	2	4	6	7	9	11	13	15	1
1.3	0.9032	0.9049	0.9066	0.9082	0.9099	0.9115	0.9131	0.9147	0.9162	0.9177	2	3	5	6	8	10	11	13	
1.4	0.9192	0.9207	0.9222	0.9236	0.9251	0.9265	0.9279	0.9292	0.9306	0.9319	1	3	4	6	7	8	10	11	Š
1.5	0.9332	0.9345	0.9357	0.9370	0.9382	0.9394	0.9406	0.9418	0.9429	0.9441	1	2	4	5	6	7	8	10	
1.6	0.9452	0.9463	0.9474	0.9484	0.9495	0.9505	0.9515	0.9525	0.9535	0.9545	1	2	3	4	5	6	7	8	
1.7	0.9554	0.9564	0.9573	0.9582	0.9591	0.9599	0.9608	0.9616	0.9625	0.9633	1	2	3	4	4	5	6	7	
1.8	0.9641	0.9649	0.9656	0.9664	0.9671	0.9678	0.9686	0.9693	0.9699	0.9706	1	1	2	3	4	4	5	6	
1.9	0.9713	0.9719	0.9726	0.9732	0.9738	0.9744	0.9750	0.9756	0.9761	0.9767	1	1	2	2	3	4	4	5	
2.0	0.9772	0.9778	0.9783	0.9788	0.9793	0.9798	0.9803	0.9808	0.9812	0.9817	0	1	1	2	2	3	3	4	
2.1	0.9821	0.9826	0.9830	0.9834	0.9838	0.9842	0.9846	0.9850	0.9854	0.9857	0	1	1	2	2	2	3	3	
2.2	0.9861	0.9864	0.9868	0.9871	0.9875	0.9878	0.9881	0.9884	0.9887	0.9890	0	1	1	1	2	2	2	3	
2.3	0.9893	0.9896	0.9898	0.9901	0.9904	0.9906	0.9909	0.9911	0.9913	0.9916	0	1	1	1	1	2	2	2	
2.4	0.9918	0.9920	0.9922	0.9925	0.9927	0.9929	0.9931	0.9932	0.9934	0.9936	0	0	1	1	1	1	1	2	
2.5	0.9938	0.9940	0.9941	0.9943	0.9945	0.9946	0.9948	0.9949	0.9951	0.9952	0	0	0	1	1	1	1	1	
2.6	0.9953	0.9955	0.9956	0.9957	0.9959	0.9960	0.9961	0.9962	0.9963	0.9964	0	0	0	0	1	1	1	1	
2.7	0.9965	0.9966	0.9967	0.9968	0.9969	0.9970	0.9971	0.9972	0.9973	0.9974	0	0	0	0	0	1	1	1	
2.8	0.9974	0.9975	0.9976	0.9977	0.9977	0.9978	0.9979	0.9979	0.9980	0.9981	0	0	0	0	0	0	0	1	
2.9	0.9981	0.9982	0.9982	0.9983	0.9984	0.9984	0.9985	0.9985	0.9986	0.9986	0	0	0	0	0	0	0	0	

#### Critical values for the normal distribution

If Z has a normal distribution with mean 0 and variance 1, then, for each value of p, the table gives the value of z such that

$$P(Z \leq z) = p$$
.

p	0.75	0.90	0.95	0.975	0.99	0.995	0.9975	0.999	0.9995
z	0.674	1.282	1.645	1.960	2.326	2.576	2.807	3.090	3.291

#### CRITICAL VALUES FOR THE t-DISTRIBUTION

If T has a t-distribution with  $\nu$  degrees of freedom, then, for each pair of values of p and  $\nu$ , the table gives the value of t such that:



 $P(T \le t) = p$ .

p	0.75	0.90	0.95	0.975	0.99	0.995	0.9975	0.999	0.999
$\nu = 1$	1.000	3.078	6.314	12.71	31.82	63.66	127.3	318.3	636.6
2	0.816	1.886	2.920	4.303	6.965	9.925	14.09	22.33	31.60
3	0.765	1.638	2.353	3.182	4.541	5.841	7.453	10.21	12.92
4	0.741	1.533	2.132	2.776	3.747	4.604	5,598	7.173	8.610
5	0.727	1.476	2.015	2.571	3.365	4.032	4.773	5.894	6.869
6	0.718	1.440	1.943	2.447	3.143	3.707	4.317	5.208	5.959
7	0.711	1.415	1.895	2.365	2.998	3.499	4.029	4.785	5.408
8	0.706	1.397	1.860	2.306	2.896	3.355	3.833	4.501	5.041
9	0.703	1.383	1.833	2.262	2.821	3.250	3.690	4.297	4.781
10	0.700	1.372	1.812	2.228	2.764	3.169	3.581	4.144	4.587
11	0.697	1.363	1.796	2.201	2.718	3.106	3.497	4.025	4.437
12	0.695	1.356	1.782	2.179	2.681	3.055	3.428	3.930	4.318
13	0.694	1.350	1.771	2.160	2.650	3.012	3.372	3.852	4.22
14	0.692	1.345	1.761	2.145	2.624	2.977	3.326	3.787	4.140
15	0.691	1.341	1.753	2.131	2.602	2.947	3.286	3.733	4.07
16	0.690	1.337	1.746	2.120	2.583	2.921	3.252	3.686	4.015
17	0.689	1.333	1.740	2.110	2.567	2.898	3.222	3.646	3.965
18	0.688	1.330	1.734	2.101	2.552	2.878	3.197	3.610	3.922
19	0.688	1.328	1.729	2.093	2.539	2.861	3.174	3.579	3.883
20	0.687	1.325	1.725	2.086	2.528	2.845	3.153	3.552	3.850
21	0.686	1.323	1.721	2.080	2.518	2.831	3.135	3.527	3.819
22	0.686	1.321	1.717	2.074	2.508	2.819	3.119	3.505	3.792
23	0.685	1.319	1.714	2.069	2.500	2.807	3.104	3.485	3.768
24	0.685	1.318	1.711	2.064	2.492	2.797	3.091	3.467	3.74
25	0.684	1.316	1.708	2.060	2.485	2.787	3.078	3.450	3.72
26	0.684	1.315	1.706	2.056	2.479	2.779	3.067	3.435	3.70
27	0.684	1.314	1.703	2.052	2.473	2.771	3.057	3.421	3.689
28	0.683	1.313	1.701	2.048	2.467	2.763	3.047	3.408	3.674
29	0.683	1.311	1.699	2.045	2.462	2.756	3.038	3.396	3.660
30	0.683	1.310	1.697	2.042	2.457	2.750	3.030	3.385	3.646
40	0.681	1.303	1.684	2.021	2.423	2.704	2.971	3.307	3.551
60	0.679	1.296	1.671	2.000	2.390	2.660	2.915	3.232	3.460
120	0.677	1.289	1.658	1.980	2.358	2.617	2.860	3.160	3.37
00	0.674	1.282	1.645	1.960	2.326	2.576	2.807	3.090	3.29

# CRITICAL VALUES FOR THE $\chi^2$ -DISTRIBUTION

If X has a  $\chi^2$ -distribution with  $\nu$  degrees of freedom then, for each pair of values of p and  $\nu$ , the table gives the value of x such that  $P(X \le x) = p$ .



						50			
p	0.01	0.025	0.05	0.9	0.95	0.975	0.99	0.995	0.999
ν=1	$0.0^31571$	$0.0^39821$	$0.0^23932$	2.706	3.841	5.024	6.635	7.879	10.83
2	0.02010	0.05064	0.1026	4.605	5.991	7.378	9.210	10.60	13.82
3	0.1148	0.2158	0.3518	6.251	7.815	9.348	11.34	12.84	16.27
4	0.2971	0.4844	0.7107	7.779	9.488	11.14	13.28	14.86	18.47
5	0.5543	0.8312	1.145	9.236	11.07	12.83	15.09	16.75	20.51
6	0.8721	1.237	1.635	10.64	12.59	14.45	16.81	18.55	22.46
7	1.239	1.690	2.167	12.02	14.07	16.01	18.48	20.28	24.32
8	1.647	2.180	2.733	13.36	15.51	17.53	20.09	21.95	26.12
9	2.088	2.700	3.325	14.68	16,92	19.02	21.67	23.59	27.88
10	2.558	3.247	3.940	15.99	18.31	20.48	23.21	25.19	29.59
11	3.053	3.816	4.575	17.28	19.68	21.92	24.73	26.76	31.26
12	3.571	4.404	5.226	18.55	21.03	23.34	26.22	28.30	32.91
13	4.107	5.009	5.892	19.81	22.36	24.74	27.69	29.82	34.53
14	4.660	5.629	6.571	21.06	23.68	26.12	29.14	31,32	36.12
15	5.229	6.262	7.261	22.31	25.00	27.49	30.58	32.80	37.70
16	5.812	6.908	7.962	23.54	26.30	28.85	32.00	34.27	39.25
17	6.408	7.564	8.672	24.77	27.59	30.19	33.41	35.72	40.79
18	7.015	8.231	9.390	25.99	28.87	31.53	34.81	37.16	42.31
19	7.633	8.907	10.12	27.20	30.14	32.85	36.19	38.58	43.82
20	8.260	9.591	10.85	28.41	31.41	34.17	37.57	40.00	45.31
21	8.897	10.28	11.59	29.62	32.67	35.48	38.93	41.40	46.80
22	9.542	10.98	12.34	30.81	33.92	36.78	40.29	42.80	48.27
23	10.20	11.69	13.09	32.01	35.17	38.08	41.64	44.18	49.73
24	10.86	12.40	13.85	33.20	36.42	39.36	42.98	45.56	51.18
25	11.52	13.12	14.61	34.38	37.65	40.65	44.31	46.93	52.62
30	14.95	16.79	18.49	40.26	43.77	46.98	50.89	53.67	59.70
40	22.16	24.43	26.51	51.81	55.76	59.34	63.69	66.77	73.40
50	29.71	32.36	34.76	63.17	67.50	71.42	76.15	79.49	86.66
60	37.48	40.48	43.19	74.40	79.08	83.30	88.38	91.95	99.61
70	45.44	48.76	51.74	85.53	90,53	95.02	100.4	104.2	112.3
80	53.54	57.15	60.39	96.58	101.9	106.6	112.3	116.3	124.8
90	61.75	65.65	69.13	107.6	113.1	118.1	124.1	128.3	137.2
100	70.06	74.22	77.93	118.5	124.3	129.6	135.8	140.2	149.4

#### WILCOXON SIGNED-RANK TEST

The sample has size n.

P is the sum of the ranks corresponding to the positive differences.

Q is the sum of the ranks corresponding to the negative differences.

T is the smaller of P and Q.

For each value of n the table gives the largest value of T which will lead to rejection of the null hypothesis at the level of significance indicated.

Critical values of T

		Level of si	gnificance	
One-tailed	0.05	0.025	0.01	0.005
Two-tailed	0.1	0.05	0.02	0.01
n = 6	2	0		
7	3	2	0	
8	5	3	1	0
9	8	5	3	1
10	10	8	5	3
11	13	10	7	5
12	17	13	9	7
13	21	17	12	9
14	25	21	15	12
15	30	25	19	15
16	35	29	23	19
17	41	34	27	23
18	47	40	32	27
19	53	46	37	32
20	60	52	43	37

For larger values of n, each of P and Q can be approximated by the normal distribution with mean  $\frac{1}{4}n(n+1)$  and variance  $\frac{1}{24}n(n+1)(2n+1)$ .

#### WILCOXON RANK-SUM TEST

The two samples have sizes m and n, where  $m \le n$ .

 $R_m$  is the sum of the ranks of the items in the sample of size m.

W is the smaller of  $R_m$  and  $m(n+m+1)-R_m$ .

For each pair of values of m and n, the table gives the largest value of W which will lead to rejection of the null hypothesis at the level of significance indicated.

#### Critical values of W

					Le	vel of si	gnifican	ce				
One-tailed	0.05	0.025	0.01	0.05	0.025	0.01	0.05	0.025	0.01	0.05	0.025	0.01
Two-tailed	0.1	0.05	0.02	0.1	0.05	0.02	0.1	0.05	0.02	0.1	0.05	0.02
n	107104	m = 3		20112	m = 4		Ü	m = 5			m = 6	
3	6	60.1	100			-						
4	6	737	100	11	10	177						
5	7	6	-	12	11	10	19	17	16			
6	8	7	-	13	12	11	20	18	17	28	26	24
7	8	7	6	14	13	11	21	20	18	29	27	25
8	9	8	6	15	14	12	23	21	19	31	29	27
9	10	8	7	16	14	13	24	22	20	33	31	28
10	10	9	7	17	15	13	26	23	21	35	32	29

					Le	vel of si	gnifican	ce				
One-tailed	0.05	0.025	0.01	0.05	0.025	0.01	0.05	0.025	0.01	0.05	0.025	0.01
Two-tailed	0.1	0.05	0.02	0.1	0.05	0.02	0.1	0.05	0.02	0.1	0.05	0.02
n		m = 7	10		m = 8			m = 9			m = 10	
7	39	36	34									
8	41	38	35	51	49	45						
9	43	40	37	54	51	47	66	62	59			
10	45	42	39	56	53	49	69	65	61	82	78	74

For larger values of m and n, the normal distribution with mean  $\frac{1}{2}m(m+n+1)$  and variance  $\frac{1}{12}mm(m+n+1)$  should be used as an approximation to the distribution of  $R_m$ .

# **>** 物理 Physics

#### Command words

Command words and their meanings help candidates know what is expected from them in the exam. The table below includes command words used in the assessment for this syllabus. The use of the command word will relate to the subject context.

Command word	What it means
Calculate	work out from given facts, figures or information
Comment	give an informed opinion
Compare	identify/comment on similarities and/or differences
Define	give precise meaning
Describe	state the points of a topic / give characteristics and main features
Determine	establish an answer using the information available
Explain	set out purposes or reasons/make the relationships between things evident/provide why and/or how and support with relevant evidence
Give	produce an answer from a given source or recall/memory
Identify	name/select/recognise
Justify	support a case with evidence/argument
Predict	suggest what may happen based on available information
Show (that)	provide structured evidence that leads to a given result
Sketch	make a simple freehand drawing showing the key features
State	express in clear terms
Suggest	apply knowledge and understanding to situations where there are a range of valid responses in order to make proposals

# Summary of key quantities, symbols and units

The list below is intended as a guide to the more important quantities which might be encountered in teaching and used in question papers.

This list is for use in both AS Level and full A Level qualifications.

Quantity	Usual symbols	Usual unit
Base quantities		
mass	m	kg
length	1	m
time	t	S
electric current	I	Α
thermodynamic temperature	T	K
amount of substance	n	mol
Other quantities		
acceleration	а	m s <sup>-2</sup>
acceleration of free fall	g	m s <sup>-2</sup>
activity of radioactive source	Α	Bq
amplitude	<i>x</i> <sub>0</sub>	m
angle	θ	°, rad
angular displacement	$\theta$	°, rad
angular frequency	ω	rad s <sup>-1</sup>
angular speed	ω	rad s <sup>-1</sup>
angular velocity	ω	rad s <sup>-1</sup>
area	Α	m <sup>2</sup>
atomic mass	$m_{\rm a}$	kg, u
attenuation/absorption coefficient	$\mu$	m <sup>-1</sup>
Avogadro constant	N <sub>A</sub>	mol <sup>-1</sup>
Boltzmann constant	k	JK <sup>-1</sup>
capacitance	C	F
Celsius temperature	θ	°C
decay constant	λ	s <sup>-1</sup>
density	ρ	kg m <sup>-3</sup>
displacement	S, X	m
distance	d	m
efficiency	η	
electric charge	g, Q	С
electric field strength	E	N C <sup>-1</sup> , V m <sup>-1</sup>
electric potential	V	٧
electric potential difference	V	٧
electromotive force	E	٧
electron mass	$m_{\rm e}$	kg, u
elementary charge	e	С

Quantity	Usual symbols	Usual unit
energy	E, U, W	J
force	F	N
frequency	f	Hz
gravitational constant	G	$N m^2 kg^{-2}$
gravitational field strength	g	N kg <sup>-1</sup>
gravitational potential	φ	J kg <sup>-1</sup>
half-life	$t_{\frac{1}{2}}$	S
Hall voltage	$V_{_{\rm H}}$	٧
heating	q, Q	J
Hubble constant	$H_0$	s <sup>-1</sup>
intensity	I	$W m^{-2}$
internal energy change	$\Delta U$	J
kinetic energy	E <sub>K</sub>	J
luminosity	L	W
magnetic flux	Φ	Wb
magnetic flux density	В	Т
mean-square speed	<c<sup>2&gt;</c<sup>	$m^2 s^{-2}$
molar gas constant	R	Jmol <sup>-1</sup> K <sup>-1</sup>
moment of force	T	Nm
momentum	p	Ns
neutron mass	$m_{\rm p}$	kg, u
neutron number	N	
nucleon number	A	
number	N, n, m	
number density (number per unit volume)	n	m <sup>-3</sup>
period	T	S
permeability of free space	$\mu_{o}$	H m <sup>-1</sup>
permittivity of free space	$\epsilon_0$	Fm <sup>-1</sup>
phase difference	φ	°, rad
Planck constant	h	Js
potential energy	E <sub>p</sub>	J
power	Ρ	W
pressure	ρ	Pa
proton mass	m <sub>p</sub>	kg, u
proton number	Z	
radiant flux intensity	F	W m <sup>-2</sup>
resistance	R	Ω
resistivity	ρ	Ωm

Quantity	Usual symbols	Usual unit
specific acoustic impedance	Z	kg m <sup>-2</sup> s <sup>-1</sup>
specific heat capacity	с	J kg <sup>-1</sup> K <sup>-1</sup>
specific latent heat	L	J kg <sup>-1</sup>
speed	u, v, w, c	m s <sup>-1</sup>
speed of electromagnetic waves	с	m s <sup>-1</sup>
spring constant	k	$N m^{-1}$
Stefan-Boltzmann constant	σ	$W m^{-2} K^{-4}$
strain	ε	
stress	$\sigma$	Pa
time constant	τ	S
torque	T	Nm
velocity	u, v, w, c	m s <sup>-1</sup>
volume	V, v	m <sup>3</sup>
wavelength	λ	m
weight	W	N
work	w, W	J
work function energy	Φ	j
Young modulus	E	Pa

# Data and formulae

The following data and formulae will appear on page 2 in Papers 1, 2 and 4.

#### Data

Data	
acceleration of free fall	$g = 9.81 \mathrm{m  s^{-2}}$
speed of light in free space	$c = 3.00 \times 10^8 \mathrm{ms^{-1}}$
elementary charge	$e = 1.60 \times 10^{-19} C$
unified atomic mass unit	$1u = 1.66 \times 10^{-27} \text{kg}$
rest mass of proton	$m_{\rm p} = 1.67 \times 10^{-27}  \rm kg$
rest mass of electron	$m_{\rm e} = 9.11 \times 10^{-31}  \rm kg$
Avogadro constant	$N_{\rm A} = 6.02 \times 10^{23}  {\rm mol}^{-1}$
molar gas constant	$R = 8.31 \mathrm{J} \mathrm{K}^{-1} \mathrm{mol}^{-1}$
Boltzmann constant	$k = 1.38 \times 10^{-23} \mathrm{J}\mathrm{K}^{-1}$
gravitational constant	$G = 6.67 \times 10^{-11} \mathrm{N} \mathrm{m}^2 \mathrm{kg}^{-2}$
permittivity of free space	$\varepsilon_0 = 8.85 \times 10^{-12} \mathrm{F  m^{-1}}$ $(\frac{1}{4\pi\varepsilon_0} = 8.99 \times 10^9 \mathrm{m  F^{-1}})$
	$(\frac{1}{4\pi\varepsilon_0} = 8.99 \times 10^9 \mathrm{mF^{-1}})$
Planck constant	$h = 6.63 \times 10^{-34} \mathrm{Js}$
Stefan-Boltzmann constant	$\sigma = 5.67 \times 10^{-8} \mathrm{Wm^{-2} K^{-4}}$

#### Formulae

uniformly accelerated motion  $s = ut + \frac{1}{2}at^2$  $v^2 = u^2 + 2as$ 

hydrostatic pressure  $\Delta p = \rho q \Delta h$ 

upthrust  $F = \rho gV$ 

Doppler effect for sound waves  $f_{o} = \frac{f_{s} V}{V \pm V_{s}}$ 

electric current I = Anvq

resistors in series  $R = R_1 + R_2 + ...$ 

resistors in parallel  $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \dots$ 

The following formulae will appear on page 3 in Paper 4.

gravitational potential  $\phi = -\frac{GM}{r}$ 

gravitational potential energy  $E_{\rm p} = -\frac{GMm}{r}$ 

pressure of an ideal gas  $p = \frac{1}{3} \frac{Nm}{V} \langle c^2 \rangle$ 

simple harmonic motion  $a = -\omega^2 x$ 

velocity of particle in s.h.m.  $v = v_0 \cos \omega t$  $v = \pm \omega \sqrt{(x_0^2 - x^2)}$ 

electric potential  $V = \frac{Q}{4\pi\varepsilon_0 r}$ 

electrical potential energy  $E_{\rm p} = \frac{Qq}{4\pi\varepsilon_0 r}$ 

capacitors in series  $\frac{1}{C} = \frac{1}{C_1} + \frac{1}{C_2} + \dots$ 

capacitors in parallel  $\mathbf{C} = \mathbf{C_1} + \mathbf{C_2} + \dots$ 

discharge of a capacitor  $x = x_0 e^{-\frac{t}{RC}}$ 

Hall voltage  $V_{\rm H} = \frac{BI}{ntq}$ 

alternating current/voltage  $x = x_0 \sin \omega t$ 

radioactive decay  $x = x_0 e^{-\lambda t}$ 

decay constant  $\lambda = \frac{0.693}{t_{_{\frac{1}{2}}}}$ 

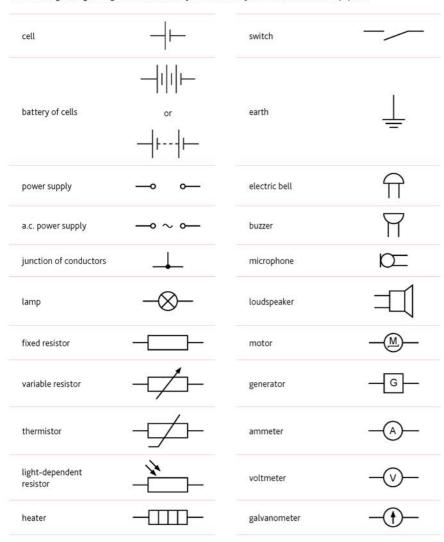
intensity reflection coefficient  $\frac{I_{\rm R}}{I_0} = \frac{(Z_1 - Z_2)^2}{(Z_1 + Z_2)^2}$ 

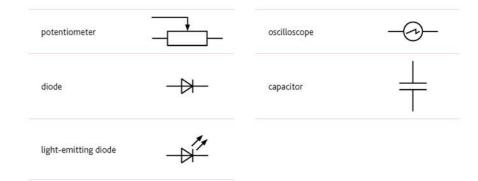
Stefan–Boltzmann law  $L = 4\pi\sigma r^2 T^4$ 

Doppler redshift  $\frac{\Delta \lambda}{\lambda} \approx \frac{\Delta f}{f} \approx \frac{v}{c}$ 

# Circuit symbols

The following table gives a guide to the circuit symbols that may be used in examination papers.





# **〉**化学 Chemistry

Organic Chemistry  13 An introduction to AS Level organic chemistry  16 An introduction to AS Level organic chemistry  17 An introduction to AS Level organic chemistry  18 An introduction to AS Level organic chemistry  19 An introduction to AS Level organic chemistry  10 An introduction to AS Level organic chemistry  11 An introduction to AS Level organic chemistry  12 An introduction to AS Level organic chemistry  13 An introduction to AS Level organic chemistry  14 An Introduction to AS Level organic chemistry  15 An introduction to AS Level organic chemistry  16 An introduction to AS Level organic chemistry  17 An introduction to AS Level organic chemistry  18 An introduction to AS Level organic chemistry  19 An introduction to AS Level organic chemistry  19 An introduction to AS Level organic chemistry  10 An introduction to AS Level organic chemistry  10 An introduction to AS Level organic chemistry  19 An introduction to AS Level organic chemistry  10 An introduction to AS Level organic chemistry  11 An introduction to AS Level organic chemistry  12 An introduction to AS Level organic chemistry  13 An introduction to AS Le		<b>&gt;</b> 0	T-C-T	I-O-I	R. C=0	carbonyl	ketone
The process of the same of different depending on the molecule.  Starked organic chemistry  And			1-0-1	<b>≖</b> −0− <b>≖</b>	6	carbonyl	aldehyde
Particular formula of displayed formula structional group functional group the center of particular formula formula functional group the same of different debending out the molecule functional group the same of different formula functional group the same of d	propan-1-ol	Ъ	I-0-I	H H H H H H H H H H H H H H H H H H H	R—OH	hydroxyl	alcohol (primary, secondary and tertiary)
name of tunctional group tunctional group steelers formula at tunctional group tunction group group tunction group tunction group tunction group tunction group	1-chloropropane (when X is chlorine)	×	I-0-x	I-0-I	R—X	halogen	halogenoalkane (primary, secondary and tertiary)
structional group  Stevel organic chemistry  Gouveuplous are rised:  This is the control of the			1 1 C 1	I————I	R C C R	C=C bond	alkene
amine of the motions are need:  Selected formula of functional group  Carboxyl  Revel of Structural formula of functional group  Carboxyl  Recombinations are need:  A PART A STRUCTURAL of functional group  Carboxyl  Release of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of different formula of functional group  Release of the same of the same of different formula of functional group  Release of the same of the same of different formula of functional group  Release of the same of the same of the same of different formula of the same of the		skeletal formula	formula	displayed	structural formula of functional group	name of functional group	Homologous series
carboxyl         R—C         H         H         O         H         H         OH         H         O         H         H         OH         H <t< th=""><th>8</th><th>name of functional group</th><th>structural formula of functional group</th><th>displayed f</th><th>ormula</th><th>skeletal formula</th><th>name</th></t<>	8	name of functional group	structural formula of functional group	displayed f	ormula	skeletal formula	name
R-C-O-C-R H-C-O-C-C-H H H H H H H H H H H H H H H H H H		carboxyl	R-C OH	±—0—± ±	ပ	° ±	propanoic acid
amine $\begin{array}{cccccccccccccccccccccccccccccccccccc$		ester	R-C-O-C-R		±-0-± 0-0		methyl propanoate
R-C=N H-C-C=N H-H H H H H H H H H H H H H H H H H H	(Klu	amine	R—NH <sub>2</sub>	I-0-I	I-0-I	NH	propylamine
		nitrile	R—C≡N	I-0-I		~	propanenitrile

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amino acid	amide (primary, secondary and tertiary)	amines (secondary and tertiary)	acyl chloride	phenol	halogenoarene	arene	Homologous series
amine and carboxyl	amide	amine	acyl chloride	phenol	halogen	arene	Name of functional group
O    HO—C—CHRNH <sub>2</sub>	R—C—NH <sub>2</sub>	R-N ±	R—C—C/	<b></b> —9	$\bigcirc_{\times}$		Structural formula of functional group
# ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ± ±	I-0-I	I—O—I Z—I I—O—I	1 - C - T - T - C - T - T - C - T - T - T	*n/a	*n/a	*n/a	Displayed formula
HO NH <sub>2</sub>	"H	I Z	2—	<u></u> —9			Skeletal formula
2-aminoethanoic aci	propanamide	(naming of secondar and tertiary amines not required)	propanoyl chloride	phenol	chlorobenzene (when $X = CI$ )	benzene	Name

# Command words

Command words and their meanings help candidates know what is expected from them in the exam. The table below includes command words used in the assessment for this syllabus. The use of the command word will relate to the subject context.

Command word	What it means
Analyse	examine in detail to show meaning, identify elements and the relationship between them $ \\$
Calculate	work out from given facts, figures or information
Compare	identify/comment on similarities and/or differences
Consider	review and respond to given information
Contrast	identify/comment on differences
Deduce	conclude from available information
Define	give precise meaning
Demonstrate	show how or give an example
Describe	state the points of a topic / give characteristics and main features
Determine	establish an answer using the information available
Discuss	write about issue(s) or topic(s) in depth in a structured way
Evaluate	judge or calculate the quality, importance, amount, or value of something
Examine	investigate closely, in detail
Explain	set out purposes or reasons / make the relationships between things evident / provide why and/or how and support with relevant evidence
Give	produce an answer from a given source or recall/memory
Identify	name/select/recognise
Justify	support a case with evidence/argument
Predict	suggest what may happen based on available information
Show (that)	provide structured evidence that leads to a given result
Sketch	make a simple drawing showing the key features
State	express in clear terms
Suggest	apply knowledge and understanding to situations where there are a range of valid responses in order to make proposals / put forward considerations

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Organic chemistry
29 An introduction to A Level organic chemistry

# Summary of key quantities, symbols and units

The list below is intended as a guide to the more important quantities which might be encountered in teaching and used in question papers. The list is not exhaustive.

Quantity	Usual symbols	Usual unit
Base quantities		
mass	m	kg, g
length	1	m
time	t	s
electric current	I	Α
thermodynamic temperature	T	K
amount of substance	n	mol
Other quantities		
Avogadro constant	L	mol <sup>-1</sup>
electric potential difference	V	V
charge	Q	С
Faraday constant	F	C mol <sup>-1</sup>
half-life	$\mathcal{T}_{\frac{1}{2}}$ , $t_{\frac{1}{2}}$	S
ionic product of water	K <sub>w</sub>	$mol^2 dm^{-6}$
molar gas constant	R	J K <sup>-1</sup> mol <sup>-1</sup>
relative atomic (isotopic) mass	$A_r$	-
relative molecular mass	M <sub>r</sub>	27
(standard) electrode (reduction) potential	(E <sup>⊕</sup> ) E	V
standard enthalpy change of reaction	ΔH <sup>Θ</sup>	Jmol <sup>-1</sup> , kJmol <sup>-1</sup>
temperature	t	°C
volume	V, v	m <sup>3</sup> , dm <sup>3</sup> , cm <sup>3</sup>

# Expected conventions for representing organic structures

This section gives details of the terminology used when referring to organic structures, reactions and mechanisms.

#### Structural formulae

In candidates' answers, an acceptable response to a request for a structural formula will be to give the minimal detail, using conventional groups, for an unambiguous structure, e.g.  $CH_3CH_2CH_2OH$  for propan-1-ol, not  $C_3H_7OH$ , and  $CH_3CHCHCH_3$  for but-2-ene, not  $C_4H_8$ .

#### Displayed formulae

A displayed formula should show both the relative placing of atoms and the number of bonds between them, for example ethanoic acid.

#### Skeletal formulae

A skeletal formula is a simplified representation of an organic structure. It is derived from the displayed formula by removing hydrogen atoms (and their associated bonds) and carbon atoms from alkyl chains, leaving just the carbon-carbon bonds in the carbon skeleton and the associated functional groups.

Skeletal or partial-skeletal representations may be used in question papers and are acceptable in candidates' answers where they are unambiguous. The skeletal formula for butan-2-ol and a partial-skeletal formula for cholesterol are shown.

The convention for representing the aromatic ring is preferred.

#### Optical isomers

When drawing a pair of optical isomers, candidates should indicate the three-dimensional structures according to the convention shown.

#### Organic reaction mechanisms

When drawing an organic reaction mechanism, candidates should use charges, dipoles, lone pairs of electrons and curly arrows to indicate the mechanism involved. An example is shown.

#### Data section

#### Contents: Tables of chemical data

- 1 Important values, constants and standards
- 2 Ionisation energies (1st, 2nd, 3rd and 4th) of selected elements in kJ mol<sup>-1</sup>
- 3 Bond energies
- 4 Standard electrode potential and reduction potentials, E<sup>o</sup>, at 298 K (25 °C)
- 5 Pauling electronegativity values
- 6 Typical proton ( ${}^{1}H$ ) chemical shift values ( $\delta$ ) relative to TMS = 0
- 7 Typical carbon ( $^{13}$ C) chemical shift values ( $\delta$ ) relative to TMS = 0
- 8 Characteristic infrared absorption frequencies for some selected bonds
- 9 The Periodic Table of Elements

#### 1 Important values, constants and standards

molar gas constant	$R = 8.31  \text{J K}^{-1}  \text{mol}^{-1}$	
Faraday constant	$F = 9.65 \times 10^4 \text{ C mol}^{-1}$	
Avogadro constant	$L = 6.02 \times 10^{23} \text{ mol}^{-1}$	
electronic charge	$e = -1.60 \times 10^{-19} \text{ C}$	
molar volume of gas	$V_{\rm m} = 22.4 {\rm dm^3 mol^{-1}}$ at s.t.p. (101 kPa and 273 K) $V_{\rm m} = 24.0 {\rm dm^3 mol^{-1}}$ at room conditions	
ionic product of water	$K_{\rm w} = 1.00 \times 10^{-14} \rm mol^2  dm^{-6}  (at  298  K  (25  {}^{\circ}C))$	
specific heat capacity of water	$c = 4.18 \text{ kJ kg}^{-1} \text{ K}^{-1} (= 4.18 \text{ J g}^{-1} \text{ K}^{-1})$	

# 2 Ionisation energies (1st, 2nd, 3rd and 4th) of selected elements in kJ $\mathrm{mol}^{-1}$

	Proton number	First	Second	Third	Fourth
Н	1	1310	9 <del>-</del> .	-	155
He	2	2370	5250	7-1	:=:
Li	3	519	7300	11800	-
Be	4	900	1760	14800	21000
В	5	799	2420	3660	25000
С	6	1090	2350	4610	6220
N	7	1400	2860	4590	7480
0	8	1310	3390	5320	7450
F	9	1680	3370	6040	8410
Ne	10	2080	3950	6150	9290
Na	11	494	4560	6940	9540
Mg	12	736	1450	7740	10500
A <i>l</i>	13	577	1820	2740	11600
Si	14	786	1580	3230	4360
Р	15	1060	1900	2920	4960
S	16	1000	2260	3390	4540
C1	17	1260	2300	3850	5150
Ar	18	1520	2660	3950	5770
K	19	418	3070	4600	5860
Ca	20	590	1150	4940	6480
Sc	21	632	1240	2390	7110
Ti	22	661	1310	2720	4170
V	23	648	1370	2870	4600
Cr	24	653	1590	2990	4770
Mn	25	716	1510	3250	5190
Fe	26	762	1560	2960	5400
Co	27	757	1640	3230	5100
Ni	28	736	1750	3390	5400
Cu	29	745	1960	3350	5690
Zn	30	908	1730	3828	5980
Ga	31	577	1980	2960	6190
Br	35	1140	2080	3460	4850

	Proton number	First	Second	Third	Fourth
Rb	37	403	2632	3900	5080
Sr	38	548	1060	4120	5440
Ag	47	731	2074	3361	5000
I	53	1010	1840	3000	4030
Cs	55	376	2420	3300	4400
Ва	56	502	966	3390	4700

# 3 Bond energies

## 3(a) Bond energies in diatomic molecules (these are exact values)

#### Homonuclear

Bond	Energy/kJ mol <sup>-1</sup>
H–H	436
N≡N	944
0=0	496
P≡P	485
S=S	425
F–F	158
CI-CI	242
Br–Br	193
I–I	151

#### Heteronuclear

Bond	Energy/kJ mol <sup>-1</sup>
H–F	562
H-C1	431
H–Br	366
H–I	299
C≡O	1077

## 3(b) Bond energies in polyatomic molecules (these are average values)

#### Homonuclear

Bond	Energy/kJ mol <sup>-1</sup>
C-C	350
C=C	610
C≡C	840
C=C (benzene)	520
N-N	160
N=N	410
0-0	150
Si–Si	225
P-P	200
S–S	265

#### Heteronuclear

Bond	Energy/kJ mol <sup>-1</sup>
C-H	410
C-CI	340
C-Br	280
C-I	240
C-N	305
C=N	610
C≡N	890
C-O	360
C=O	740
C=O in CO <sub>2</sub>	805
N-H	390
N-Cl	310
0-Н	460
Si-C1	360
Si-H	320
Si-O (in SiO <sub>2</sub> (s))	460
Si=O (in SiO <sub>2</sub> (g))	640
P-H	320
P-C1	330
P-O	340
P=O	540
S-H	340
S-C1	250
S-O	360
S=O	500

# 4 Standard electrode (reduction) potentials, $E^{\ominus}$ at 298 K (25 °C) $E^{\ominus}$ in alphabetical order

Electro	ode re	action	
Ag+ + e-	$\rightleftharpoons$	Ag	+0.80
$AI^{3+} + 3e^{-}$	$\rightleftharpoons$	Al	-1.66
Ba <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Ва	-2.90
Br <sub>2</sub> + 2e <sup>-</sup>	=	2Br <sup>-</sup>	+1.07
Ca <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Ca	-2.87
Cl <sub>2</sub> + 2e <sup>-</sup>	$\rightleftharpoons$	2C1-	+1.36
2HOC <i>l</i> + 2H <sup>+</sup> + 2e <sup>-</sup>	=	C1 <sub>2</sub> + 2H <sub>2</sub> O	+1.64
ClO" + H <sub>2</sub> O + 2e"	$\rightleftharpoons$	CI-+2OH-	+0.89
Co <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Co	-0.28
Co <sup>3+</sup> + e <sup>-</sup>	$\rightleftharpoons$	Co <sup>2+</sup>	+1.82
$[Co(NH_3)_6]^{2+} + 2e^-$	$\rightleftharpoons$	Co + 6NH <sub>3</sub>	-0.43
Cr <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Cr	-0.91
Cr <sup>3+</sup> + 3e <sup>-</sup>	=	Cr	-0.74
Cr <sup>3+</sup> + e <sup>-</sup>	$\rightleftharpoons$	Cr <sup>2+</sup>	-0.41
Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup> + 14H <sup>+</sup> + 6e <sup>-</sup>	$\rightleftharpoons$	2Cr <sup>3+</sup> + 7H <sub>2</sub> O	+1.33
Cu <sup>+</sup> + e <sup>-</sup>	$\rightleftharpoons$	Cu	+0.52
Cu <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Cu	+0.34
Cu <sup>2+</sup> + e <sup>-</sup>	$\rightleftharpoons$	Cu <sup>+</sup>	+0.15
$[Cu(NH_3)_4]^{2+} + 2e^-$	$\rightleftharpoons$	Cu + 4NH <sub>3</sub>	-0.05
F <sub>2</sub> + 2e <sup>-</sup>	$\rightleftharpoons$	2F-	+2.87
Fe <sup>2+</sup> + 2e <sup>-</sup>	=	Fe	-0.44
Fe <sup>3+</sup> + 3e <sup>-</sup>	=	Fe	-0.04
Fe <sup>3+</sup> + e <sup>-</sup>	$\rightleftharpoons$	Fe <sup>2+</sup>	+0.77
$[Fe(CN)_{6}]^{3-} + e^{-}$	$\Rightarrow$	[Fe(CN) <sub>6</sub> ] <sup>4-</sup>	+0.36
Fe(OH) <sub>3</sub> + e <sup>-</sup>	$\rightleftharpoons$	Fe(OH) <sub>2</sub> + OH <sup>-</sup>	-0.56
2H* + 2e-	$\rightleftharpoons$	H <sub>2</sub>	0.00
2H <sub>2</sub> O + 2e <sup>-</sup>	=	H <sub>2</sub> + 20H <sup>-</sup>	-0.83
I <sub>2</sub> + 2e <sup>-</sup>	$\rightleftharpoons$	2 <b>I</b> -	+0.54
K <sup>+</sup> + e <sup>-</sup>	$\rightleftharpoons$	К	-2.92
Li+ + e-	$\rightleftharpoons$	Li	-3.04
Mg <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Mg	-2.38

	, , , ,	action	
Mn <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Mn	-1.18
Mn <sup>3+</sup> + e <sup>-</sup>	$\rightleftharpoons$	Mn <sup>2+</sup>	+1.49
$MnO_2 + 4H^+ + 2e^-$	$\rightleftharpoons$	$Mn^{2+} + 2H_2O$	+1.23
MnO <sub>4</sub> + e	$\rightleftharpoons$	MnO <sub>4</sub> <sup>2-</sup>	+0.56
MnO <sub>4</sub> + 4H <sup>+</sup> + 3e <sup>-</sup>	$\rightleftharpoons$	$MnO_2 + 2H_2O$	+1.67
MnO <sub>4</sub> + 8H+ + 5e	$\rightleftharpoons$	Mn <sup>2+</sup> + 4H <sub>2</sub> O	+1.52
NO <sub>3</sub> + 2H + e	$\rightleftharpoons$	$NO_2 + H_2O$	+0.81
NO <sub>3</sub> + 3H+ + 2e-	$\rightleftharpoons$	$HNO_2 + H_2O$	+0.94
NO <sub>3</sub> <sup>-</sup> + 10H <sup>+</sup> + 8e <sup>-</sup>	$\rightleftharpoons$	NH <sub>4</sub> <sup>+</sup> + 3H <sub>2</sub> O	+0.87
Na <sup>+</sup> + e <sup>-</sup>	$\rightleftharpoons$	Na	-2.71
Ni <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Ni	-0.25
$[Ni(NH_3)_6]^{2+} + 2e^-$	$\rightleftharpoons$	Ni + 6NH <sub>3</sub>	-0.51
H <sub>2</sub> O <sub>2</sub> + 2H <sup>+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	2H <sub>2</sub> O	+1.77
HO <sub>2</sub> <sup>-</sup> + H <sub>2</sub> O + 2e <sup>-</sup>	$\rightleftharpoons$	30H <sup>-</sup>	+0.88
O <sub>2</sub> + 4H <sup>+</sup> + 4e <sup>-</sup>	=	2H <sub>2</sub> O	+1.23
O <sub>2</sub> + 2H <sub>2</sub> O + 4e <sup>-</sup>	$\rightleftharpoons$	40H	+0.40
O <sub>2</sub> + 2H <sup>+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	H <sub>2</sub> O <sub>2</sub>	+0.68
O <sub>2</sub> + H <sub>2</sub> O + 2e <sup>-</sup>	$\rightleftharpoons$	HO <sub>2</sub> + OH	-0.08
$Pb^{2+} + 2e^{-}$	$\rightleftharpoons$	Pb	-0.13
Pb <sup>4+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Pb <sup>2+</sup>	+1.69
PbO <sub>2</sub> + 4H <sup>+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Pb <sup>2+</sup> + 2H <sub>2</sub> O	+1.47
SO <sub>4</sub> <sup>2-</sup> + 4H <sup>+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	SO <sub>2</sub> + 2H <sub>2</sub> O	+0.17
S <sub>2</sub> O <sub>8</sub> <sup>2-</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	2SO <sub>4</sub> <sup>2-</sup>	+2.01
S <sub>4</sub> O <sub>6</sub> <sup>2-</sup> + 2e <sup>-</sup>	=	2S <sub>2</sub> O <sub>3</sub> <sup>2-</sup>	+0.09
$Sn^{2+} + 2e^{-}$	$\rightleftharpoons$	Sn	-0.14
Sn <sup>4+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Sn <sup>2+</sup>	+0.15
$V^{2+} + 2e^{-}$	$\rightleftharpoons$	V	-1.20
V <sup>3+</sup> + e <sup>-</sup>	$\rightleftharpoons$	V <sup>2+</sup>	-0.26
$VO^{2+} + 2H^{+} + e^{-}$	$\rightleftharpoons$	V <sup>3+</sup> + H <sub>2</sub> O	+0.34
VO <sub>2</sub> + + 2H+ + e	$\rightleftharpoons$	VO <sup>2+</sup> + H <sub>2</sub> O	+1.00
VO <sub>3</sub> + 4H + e	$\rightleftharpoons$	VO <sup>2+</sup> + 2H <sub>2</sub> O	+1.00
Zn <sup>2+</sup> + 2e <sup>-</sup>	$\rightleftharpoons$	Zn	-0.76

All ionic states refer to aqueous ions but other state symbols have been omitted.

# 5 Pauling electronegativity values

H 2.1																
Li 1.0	Be 1.6											B 2.0	C 2.5	N 3.0	O 3.5	F 4.0
Na 0.9	Mg 1.3											Al 1.5	Si 1.9	P 2.2	S 2.6	Cl 3.0
K 0.8	Ca 1.0	Sc 1.4	Ti 1.5	V 1.6	Cr 1.7	Mn 1.5	Fe 1.8	Co 1.9	Ni 1.9	Cu 1.9	Zn 1.6	Ga 1.8	Ge 2.0	As 2.2	Se 2.6	Br 2.6

# 6 Typical proton ( $^{1}$ H) NMR chemical shift values ( $\delta$ ) relative to TMS = 0

Environment of proton	Example	Chemical shift range δ/ppm
alkane	-CH <sub>3</sub> , -CH <sub>2</sub> -, >CH-	0.9-1.7
alkyl next to C=O	CH <sub>3</sub> -C=O, -CH <sub>2</sub> -C=O, >CH-C=O	2.2-3.0
alkyl next to aromatic ring	CH <sub>3</sub> -Ar, -CH <sub>2</sub> -Ar, >CH-Ar	2.3-3.0
alkyl next to electronegative atom	CH <sub>3</sub> -O, -CH <sub>2</sub> -O, -CH <sub>2</sub> -C <i>l</i>	3.2-4.0
attached to alkene	=C <b>H</b> R	4.5-6.0
attached to aromatic ring	H–Ar	6.0-9.0
aldehyde	HCOR	9.3-10.5
alcohol	ROH	0.5-6.0
phenol	Ar-O <b>H</b>	4.5-7.0
carboxylic acid	RCOOH	9.0-13.0
alkyl amine	R-N <b>H</b> -	1.0-5.0
aryl amine	Ar-NH <sub>2</sub>	3.0-6.0
amide	RCONHR	5.0-12.0

 $\label{eq:Note:delta} \mbox{Note: } \delta \mbox{ values for O-H and N-H protons can vary depending on solvent and concentration.} \\ \mbox{Ar is used to represent an aromatic ring.}$ 

# 7 Typical carbon-13 ( $^{13}$ C) NMR chemical shift values ( $\delta$ ) relative to TMS = 0

Hybridisation of the carbon atom	Environment of carbon atom	Example	Chemical shift range δ/ppm
sp <sup>3</sup>	alkyl	CH <sub>3</sub> -, CH <sub>2</sub> -, -CH<, >C<	0-50
sp <sup>3</sup>	next to alkene/arene	-C-C=C, -C-Ar	25-50
sp <sup>3</sup>	next to carbonyl/carboxyl	C-COR, C-O <sub>2</sub> R	30-65
sp <sup>3</sup>	next to halogen	C-X	30-60
sp <sup>3</sup>	next to oxygen	<b>c</b> -0	50-70
sp <sup>2</sup>	alkene or arene	>C=C<, c	110-160
sp <sup>2</sup>	carboxyl	R-COOH, R-COOR	160-185
sp <sup>2</sup>	carbonyl	R-CHO, R-CO-R	190-220
sp	nitrile	R-C≡N	100-125

# 8 Characteristic infrared absorption frequencies for some selected bonds

Bond	Functional groups containing the bond	Characteristic infrared absorption range (in wavenumbers)/cm <sup>-1</sup>
C-O	hydroxy, ester	1040-1300
C=C	aromatic compound, alkene	1500-1680
C=O	amide carbonyl, carboxyl ester	1640–1690 1670–1740 1710–1750
C≡N	nitrile	2200-2250
C-H	alkane	2850-2950
N-H	amine, amide	3300-3500
O-H	carboxyl hydroxy	2500–3000 3200–3600

# 9 The Periodic Table of Elements

200	18	Follows 4.0	o Q	20.2	18	Ā	39.9	36	궃	krypton 83.8	25	×e	xenon 131,3	98	쮼	radon	118	5
	17		எட	fluorine 19.0	17	20	chlorine 35.5	35	Ä	Promine 79.9	53	Н	126.9	85	¥	ostatino	117	P
	16		® O	16.0	16	S	32.1	34	Se	3elenium 79.0	52	Te	127.6	84	Ъ	polonium	116	
	15		۲	14.0	15	۵	phosphons 31.0	33	As	amenic 74.9	51	Sb	antimony 121.8	83	ë	209.0	115	Mo
	14		٥ 0	carbon 12.0	4	S	silicon 28.1	32	Ge	germanium 72.6	90	Sn	118.7	82	Ъ	ked 207.2	114	ù
	13		5 <b>B</b>	boron 10.8	13	Al	ahaminiam 27.0	31	Ga	gallium 69.7	49	'n	indiam 114.8	81	11	204,4	113	N N
							12	30	Z	zinc 65.4	48	ප	cadmium 112.4	80	Ð	mercury 200.6	112	ć
							7	53	J.	copper 63.5	47	Ag	107.9	79	Αu	pold 0.791	111	Č
dn							10	28	ž	nicket 58.7	46	В	pelledium 106,4	78	£	plesinum 195.1	110	ć
Group							6	27	ပိ	cobalt. 58.9	45	듄	rhodium 102.9	11	ä	192.2	109	N.A4
		- <b>I</b>					80	26	Fe	issn 55.8	44	R.	101.1	2.6	SO	190.2	108	'n
			-				7	25	M	SA.9	43	ည	bohnedum	75	Re	menium 186.2	107	40
			loc	8			9	24	ပ်	direction 52.0	42	Mo	molybdenum 95.9	74	≥	tungston 183.8	106	0
		Key	atomic symbol	namo relative atomic mass			2	23	>	sanadium 50.9	41	QN.	nioblam 92.9	ħ	ā	tantahan 180.9	105	2
			atol	relat			4	22	F	Samum 47.9	40	Z	arcontum 91.2	72	Ì	178.5	104	č
							က	21	Sc	scandum 45.0	39	>	94354m	57-71	lanthanoids		89-103	actionists
	2		₹ Be	ресущит 9.0	12	Mg	magnesium 24.3	20	Ca	40.1	38	Š	87.6	58	Ba	137.3	88	0
	-		e :	Bhum 6.9	11	Na	23.0	19	×	39.1	37	Rb dy	n.bidum 85,5	55	Cs	132.9	87	ů

Nd Feedymium proc	ă.	Pm ometrium	Sm samatur 150.4	Eu europium 152.0	Gd gadolinium 157.3	Tb Tb	Dy dysprosium 162.5	57 Tombun 164.9	editum 167.3	69 Tm Thullum 168.9	Yb ytertiam	Lu botelout 175.0
		. 0	Pn Pn	98 Am	S C	76 <b>B</b>	\$ 5	® Es	F <sub>T</sub>	Md Md	201 N	ت ء ت
e	e	and a	phatonium	arrendum	outurn	berkelium	calfornam	eintleinken	formium	mendelevium	nobelum	Investigati

# > 生物 Biology

#### Command words

Command words and their meanings help candidates know what is expected from them in the exam. The table below includes command words used in the assessment for this syllabus. The use of the command word will relate to the subject context.

Command word	What it means
Assess	make an informed judgement
Calculate	work out from given facts, figures or information
Comment	give an informed opinion
Compare	identify/comment on similarities and/or differences
Contrast	identify/comment on differences
Define	give precise meaning
Describe	state the points of a topic / give characteristics and main features
Discuss	write about issue(s) or topic(s) in depth in a structured way
Explain	set out purposes or reasons / make the relationships between things evident / provide why and/or how and support with relevant evidence
Give	produce an answer from a given source or recall/memory
Identify	name/select/recognise
Outline	set out main points
Predict	suggest what may happen based on available information
Sketch	make a simple drawing showing the key features
State	express in clear terms
Suggest	apply knowledge and understanding to situations where there are a range of valid responses in order to make proposals / put forward considerations

# Mathematical formulae (A Level only)

Candidates are **not** expected to remember the formulae and symbols for the mathematical formulae in the table below. When needed, candidates will be provided with this information.

# Hardy–Weinberg equations equation 1: Key to symbols: $p+q=1 \qquad p=\text{frequency of the dominant allele, e.g. A}$ q=frequency of the recessive allele, e.g. a $p^2+2pq+q^2=1 \qquad p^2=\text{frequency of homozygous dominant genotype, e.g. AA}$ 2pq=frequency of heterozygous genotype, e.g. Aa $q^2=\text{frequency of homozygous recessive genotype, e.g. aa}$ Lincoln index $N=\frac{n_1\times n_2}{m_2} \qquad \text{Key to symbols:}$ N=estimate of population size

N = estimate of population size  $n_1 = \text{number of individuals captured in first sample}$   $n_2 = \text{number of individuals (both marked and unmarked)}$ 

captured in second sample

 $m_2$  = number of marked individuals recaptured in second sample

#### Simpson's index of diversity (D)

$$D = 1 - \left(\sum \left(\frac{n}{N}\right)^2\right)$$

Key to symbols:

 n = number of individuals of each type present in the sample (types may be species and/or higher taxa such as genera, families, etc.)

 $N=\mbox{the total number of all individuals of all types present in the sample}$ 

# chi-squared ( $\chi^2$ ) test

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

Key to symbols:

O = observed value E = expected value

#### sample standard deviation (s)

$$s = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

# Key to symbols:

x = observation

 $\tilde{x}$  = mean

n = sample size (number of observations)

#### standard error (SE)

$$SE = \frac{S}{\sqrt{n}}$$

#### Key to symbols:

s =sample standard deviation

n =sample size (number of observations)

#### 95% confidence intervals (95% CI)

You can assume this approximation:

Key to symbols:

95% CI =  $\bar{x} \pm (2 \times SE)$ 

 $\bar{x}$  = mean

SE = standard error

t-test

$$= \frac{|\bar{x}_1 - \bar{x}_2|}{\sqrt{\left(\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}\right)^2}}$$

Key to symbols:

 $\bar{x} = \text{mean}$ 

s =sample standard deviation

n = sample size (number of observations)

#### Pearson's linear correlation (r)

 $r = \frac{\sum xy - n\bar{x}\bar{y}}{(n-1)s_x s_y}$ 

Key to symbols:

x, y = observations

 $\bar{x}$ ,  $\bar{v}$  = means

n = sample size (number of observations)

s =sample standard deviation

#### Spearman's rank correlation (r<sub>s</sub>)

$$r_s = 1 - \left(\frac{6 \times \sum D^2}{n^3 - n}\right)$$

Key to symbols:

 $D\,$  = difference in rank between each pair of measurements

n = number of pairs of items in the sample

#### Number of degrees of freedom for the chi-squared test and the t-test

In both the *t*-test and the chi-squared test, candidates are expected to know how to calculate the number of degrees of freedom, without being provided with the formulae.

#### number of degrees of freedom (v) for the chi-squared test

v = c - 1

Key to symbols:

c = number of classes

#### number of degrees of freedom (v) for the t-test

$$v = n_1 + n_2 - 2$$

Key to symbols:

n = sample size (number of observations)





	第一周 Week 1 日期 Date:2021.09.01	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第一周 Week 1 日期 Date:2021.09.02		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第一周 Week 1 日期 Date:2021.09.03		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二周 Week 2 日期 Date:2021.09.06		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二周 Week 2 日期 Date:2021.09.07		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二周 Week 2 日期 Date:2021.09.08		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二周 Week 2 日期 Date:2021.09.09		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二周 Week 2 日期 Date:2021.09.10		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第三周 Week 3 日期 Date:2021.09.13		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第三周 Week 3 日期 Date:2021.09.14		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第三周 Week 3 日期 Date:2021.09.15		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第三周 Week 3 日期 Date:2021.09.16		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三节</b> P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第三周 Week 3 日期 Date:2021.09.17		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第三周 Week 3 日期 Date:2021.09.18		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第四周 Week 4 日期 Date:2021.09.22		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第四周 Week 4 日期 Date:2021.09.23		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第四周 Week 4 日期 Date:2021.09.24		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
<b>第四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第五周 Week 5 日期 Date:2021.09.26		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三</b> 节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第五周 Week 5 日期 Date:2021.09.27		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
<b>第四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第五周 Week 5 日期 Date:2021.09.28		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第五周 Week 5 日期 Date:2021.09.29		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第五周 Week 5 日期 Date:2021.09.30		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

# 本月反思 Monthly Reflection

本月我学到了什么? What did I learn this month?
本月我最感兴趣的是什么? What is my favorite moment this month?
本月我的反思? What's my reflection this month?
家长的话 Parent's word
老师的话 Teacher's word

# 第六周 Week 6 日期 Date:2021,10.08

日期 Date:2021.10.08		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第六周 Week 6 日期 Date:2021.10.09		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第七周 Week 7 日期 Date:2021.10.11		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第七周 Week 7 日期 Date:2021.10.12		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第七周 Week 7 日期 Date:2021.10.13		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第七周 Week 7 日期 Date:2021.10.14		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第七周 Week 7 日期 Date:2021.10.15		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四</b> 节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第八周 Week 8 日期 Date:2021.10.18		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第八周 Week 8 日期 Date:2021.10.19		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第 <b>八</b> 周 Week 8 日期 Date:2021.10.20		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第八周 Week 8 日期 Date:2021.10.21		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第八周 Week 8 日期 Date:2021.10.22		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第九周 Week 9 日期 Date:2021.10.25		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第九周 Week 9 日期 Date:2021.10.26		
学科 Subject	作业记录/Homework Details	完成日期 Due Date	
第一节 P1			
第二节 P2			
第三节 P3			
第四节 P4			
第五节 P5			
第六节 P6			
第七节 P7			
第八节 P8			
备注 Notes	家长签字 Parent's signature:		

第九周 Week 9 日期 Date:2021.10.27		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三</b> 节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第九周 Week 9 日期 Date:2021.10.28		
学科 Subject	作业记录/Homework Details	完成日期 Due Date	
第一节 P1			
第二节 P2			
第三节 P3			
第四节 P4			
第 <b>五节</b> P5			
第六节 P6			
第七节 P7			
第八节 P8			
备注 Notes	家长签字 Parent's signature:		

第九周 Week 9 日期 Date:2021.10.29		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

#### 本月反思 Monthly Reflection

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家长的话 Parent's word
老师的话 Teacher's word

### 第十周 Week 10 日期 Date:2021.11.01

学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十周 Week 10 日期 Date:2021.11.02		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第十周 Week 10 日期 Date:2021.11.03	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三节</b> P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十周 Week 10 日期 Date:2021.11.04		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十周 Week 10 日期 Date:2021.11.05		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十一周 Week 11 日期 Date:2021.11.08		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十一周 Week 11 日期 Date:2021.11.09		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十一周 Week 11 日期 Date:2021.11.10		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十一周 Week 11 日期 Date:2021.11.11		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十一周 Week 11 日期 Date:2021.11.12		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十二周 Week 12 日期 Date:2021.11.15		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十二周 Week 12 日期 Date:2021.11.16		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十二周 Week 12 日期 Date:2021.11.17		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十二周 Week 12 日期 Date:2021.11.18		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十二周 Week 12 日期 Date:2021.11.19		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十三周 Week 13 日期 Date:2021.11.22		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十三周 Week 13 日期 Date:2021.11.23		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十三周 Week 13 日期 Date:2021.11.24		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十三周 Week 13 日期 Date:2021.11.25		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十三周 Week 13 日期 Date:2021.11.26		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

# 本月反思 Monthly Reflection

本月我学到了什么? What did I learn this month?
本月我最感兴趣的是什么? What is my favorite moment this month?
本月我的反思? What's my reflection this month?
家长的话 Parent's word
老师的话 Teacher's word

第十四周 Week 14 日期 Date:2021.11.29		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
<b>第四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十四周 Week 14 日期 Date:2021.11.30		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
<b>第三节</b> P3		
<b>第四节</b> P4		
<b>第五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
<b>备注</b> Notes	家长签字 Parent's signature:	

第十四周 Week 14 日期 Date:2021.12.01		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十四周 Week 14 日期 Date:2021.12.02		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
<b>第三节</b> P3		
<b>第四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十四周 Week 14 日期 Date:2021.12.03		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
第三节 P3		
第四节 P4		
<b>第五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十五周 Week 15 日期 Date:2021.12.06		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
第三节 P3		
<b>第四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
<b>备注</b> Notes	家长签字 Parent's signature:	

第十五周 Week 15 日期 Date:2021.12.07		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
<b>第五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十五周 Week 15 日期 Date:2021.12.08		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三节</b> P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十五周 Week 15 日期 Date:2021.12.09		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十五周 Week 15 日期 Date:2021.12.10		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三节</b> P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第十六周 Week 16 日期 Date:2021.12.13		
学科 Subject	作业记录/Homework Details	完成日期 Due Date	
第一节 P1			
<b>第二节</b> P2			
第三节 P3			
第四节 P4			
第五节 P5			
第六节 P6			
第七节 P7			
第八节 P8			
备注 Notes	家长签字 Parent's signature:		

	第十六周 Week 16 日期 Date:2021.12.14	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三节</b> P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第十六周 Week 16 日期 Date:2021.12.15		
学科 Subject	作业记录/Homework Details	完成日期 Due Date	
第一节 P1			
第二节 P2			
第三节 P3			
第四节 P4			
第五节 P5			
第六节 P6			
第七节 P7			
第八节 P8			
备注 Notes	家长签字 Parent's signature:		

第十六周 Week 16 日期 Date:2021.12.16		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三节</b> P3		
第 <b>四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
<b>备注</b> Notes	家长签字 Parent's signature:	

	第十六周 Week 16 日期 Date:2021.12.17		
学科 Subject	作业记录/Homework Details	完成日期 Due Date	
第一节 P1			
第二节 P2			
第三节 P3			
第四节 P4			
<b>第五节</b> P5			
第六节 P6			
第七节 P7			
第八节 P8			
备注 Notes	家长签字 Parent's signature:		

	第十七周 Week 17 日期 Date:2021.12.20	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
<b>第四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十七周 Week 17 日期 Date:2021.12.21		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第十七周 Week 17 日期 Date:2021.12.22	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
<b>第三节</b> P3		
<b>第四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第十七周 Week 17 日期 Date:2021.12.23	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十七周 Week 17 日期 Date:2021.12.24		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第 <b>三节</b> P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十八周 Week 18 日期 Date:2021.12.27		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第十八周 Week 18 日期 Date:2021.12.28	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
第三节 P3		
<b>第四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十八周 Week 18 日期 Date:2021.12.29		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

	第十八周 Week 18 日期 Date:2021.12.30	
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
<b>第二节</b> P2		
第三节 P3		
第 <b>四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十八周 Week 18 日期 Date:2021.12.31		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第 <b>四节</b> P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

### 本月反思 Monthly Reflection

本月我学到了什么? What did I learn this month?
本月我最感兴趣的是什么? What is my favorite moment this month?
本月我的反思? What's my reflection this month?
家长的话 Parent's word
老师的话 Teacher's word

第十九周 Week 19 日期 Date:2022.01.04		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十九周 Week 19 日期 Date:2022.01.05		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十九周 Week 19 日期 Date:2022.01.06		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第十九周 Week 19 日期 Date:2022.01.07		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二十周 Week 20 日期 Date:2022.01.10		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二十周 Week 20 日期 Date:2022.01.11		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五</b> 节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二十周 Week 20 日期 Date:2022.01.12		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第 <b>五节</b> P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二十周 Week 20 日期 Date:2022.01.13		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二十周 Week 20 日期 Date:2022.01.14			
学科 Subject	作业记录/Homework Details	完成日期 Due Date	
第一节 P1			
第二节 P2			
第三节 P3			
第四节 P4			
第五节 P5			
第六节 P6			
第七节 P7			
第八节 P8			
备注 Notes	家长签字 Parent's signature:		

第二十一周 Week 21 日期 Date:2022.01.17		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

第二十一周 Week 21 日期 Date:2022.01.18			
学科 Subject	作业记录/Homework Details	完成日期 Due Date	
第一节 P1			
第二节 P2			
第三节 P3			
第四节 P4			
第五节 P5			
第六节 P6			
第七节 P7			
第八节 P8			
备注 Notes	家长签字 Parent's signature:		

第二十一周 Week 21 日期 Date:2022.01.19		
学科 Subject	作业记录/Homework Details	完成日期 Due Date
第一节 P1		
第二节 P2		
第三节 P3		
第四节 P4		
第五节 P5		
第六节 P6		
第七节 P7		
第八节 P8		
备注 Notes	家长签字 Parent's signature:	

## 本月反思 Monthly Reflection

本月我学到了什么? What did I learn this month?
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