
Morning Reading 晨读

Grade 11 · AS · Week 18

Read each word aloud, then copy the English word three times. 朗读每个单词，然后把英语单词抄写三遍。

Reading 阅读

Read the passage aloud twice. 把短文朗读两遍。

How do you know your program is correct? You hunt for errors, and they come in kinds. A **syntax error** breaks the language rules, and the translator refuses to run at all. A **run-time error** appears while the program runs, like dividing by zero. The most dangerous is the **logic error**: the program runs happily and gives the wrong answer. To catch them, testers do a **dry run** on paper, use **white-box testing** to exercise every path inside the code, and **black-box testing** to check inputs against expected outputs without looking inside. Before release come **alpha testing** in the company and **beta testing** with real users.

Chemists identify unknown substances with the same detective spirit. **Infrared spectroscopy** shines light through a sample: each bond absorbs its own frequencies, leaving a fingerprint. **Mass spectrometry** weighs the fragments of a molecule.

One last economic idea for the term: under a **floating exchange rate**, a currency's **appreciation** makes imports cheaper but exports harder to sell. The whole year connects: measure, model, test, and question everything.

Talk about it 说一说:

1. Find the logic error: a program to average two numbers computes $a + b / 2$.
2. Which subject taught you the most surprising idea this term? Explain it in two sentences.

Physics

Topics 4–8 · Forces, density and pressure, Work, energy and power, Deformation of solids, Waves, Superposition

closed vector triangle 矢量三角形

electrical 电能

bungee jumper 蹦极者

rubber band 橡皮筋

elastic hysteresis 弹性滞后

propagates 传播

Wave motion 波动

crests 波峰

radians 弧度

wavefronts 波前

compressions 压缩

rarefactions 稀疏

electromagnetic waves
电磁波

γ -rays γ 射线

waves 波

principle of superposition 叠加

progressive waves 行波

wavelengths 波长

slits 狭缝

Chemistry

Topics 20–22 · Polymerisation, Organic synthesis, Analytical techniques

○ monomer 单体			
↔ repeat unit 重复单元			
↻ poly(ethene) 聚乙烯			
↻ poly(chloroethene) 聚氯乙烯			
⊗ non-biodegradable 不可生物降解			
∞ synthetic route 合成路线			
⚗ reagent 试剂			
☞ by-product 副产物			
📡 infrared spectroscopy 红外光谱			
⬇ absorption 吸收			
λ wavenumber 波数			
📊 mass spectrometry 质谱			
÷ mass-to-charge ratio 质荷比			
📊 isotopic abundance 同位素丰度			
⊕ molecular ion 分子离子			
📊 molecular ion peak 分子离子峰			
🔪 fragmentation 碎裂			
🧩 fragment 碎片			

Biology

Topics 10–11 · Infectious diseases, Immunity

 resistance 耐药性			
 phagocyte 吞噬细胞			
 macrophage 巨噬细胞			
 phagocytosis 吞噬作用			
 self antigen 自身抗原			
 non-self antigen 非自身抗原			
 immune response 免疫反应			
 T-helper cell 辅助性 T 细胞			
 plasma cell 浆细胞			
 memory cell 记忆细胞			
 T-killer cell 杀伤性 T 细胞			
 antigen-binding site 抗原结合位点			
 variable region 可变区			
 monoclonal antibody 单克隆抗体			
 hybridoma 杂交瘤			
 diagnosis 诊断			
 active immunity 主动免疫			
 passive immunity 被动免疫			

 **natural immunity** 天然免疫

 **artificial immunity** 人工免疫

 **vaccination** 疫苗接种

 **herd immunity** 群体免疫

Mathematics

Topics 1–5 · Pure Mathematics 1, Probability & Statistics 1

 **continuity correction** 连续性校正

 **standardisation** 标准化

coefficients 系数

point of inflexion 拐点

improper integral 广义积分

back-to-back 背靠背

measure of central tendency 集中趋势

Coding 编码

assumed mean 假定平均数

Further Mathematics

Topic 4 · Further Probability & Statistics

 **sign test** 符号检验

 **Wilcoxon signed-rank test** 威尔科克森符号秩检验

Σ Wilcoxon rank-sum test
威尔科克森秩和检验

f probability generating function 概率母函数

Computer Science

Topics 3–11 · Hardware, Processor Fundamentals, Security, privacy and data integrity, Ethics and Ownership, Algorithm Design and Problem-solving, Programming

floating-gate transistor
浮栅晶体管

pits 凹坑

lands 平台

preset value 预设值

number of cores 核心

amount of RAM 随机存取存储器

register transfer notation 寄存器传送记法

interrupt register 中断寄存器

opcode 操作码

operand 操作数

1. Malware 恶意软件

parity block check 奇偶块校验

avoid conflicts of interest 利益冲突

code of conduct 行为准则

sub-problem 子问题

modules 模块			
identifier 标识符			
initialise 初始化			
counter 计数器			
insert 附页			
trace table 跟踪表			
return value 返回值			
format 格式			
IDE 集成开发环境			
breakpoint 断点			
single stepping 单步执行			

Economics

Topic 6 · International economic issues

 trade in goods 货物贸易			
 trade in services 服务贸易			
 primary income 初次收入			
 secondary income 二次收入			
 current account deficit 经常账户赤字			
 current account surplus 经常账户盈余			
 floating exchange rate 浮动汇率			
 fixed exchange rate 固定汇率			

 managed exchange rate 管理浮动汇率			
 appreciation 升值			
 depreciation 贬值			
 expenditure-reducing 支出减少			
 expenditure-switching 支出转换			
 competitiveness 竞争力			