
Morning Reading 晨读

Grade 11 · AS · Week 13

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。

Your school runs on a **relational database**, even if you never see it. One **table** stores students, another stores classes. Each row is a **record**; each column, such as name or birthday, is a **field**. Every student has a unique **primary key**, and the class table points to it with a **foreign key**. That link is what makes the database relational: information is stored once and connected, never copied. When the office prints your timetable, a query joins the tables in milliseconds.

Physics this week showed light behaving strangely. Shine one small light through two narrow slits and the screen shows dark and bright stripes. The waves from the two slits show **interference**: where crest meets crest the light is bright; where crest meets trough, darkness. This **double-slit** experiment convinced physicists that light travels as a wave.

Economies swing through the **business cycle**. In a **boom**, jobs are easy to find and firms invest; then demand cools and growth slows, until a **recovery** starts the cycle again.

Talk about it 说一说:

1. Why store a student's name once, in one table, instead of in every class list?
2. Two waves meet and produce darkness. Explain how this is possible.

Physics

Topics 9–10 · Electricity, D.C. circuits

 **Ohm's law** 欧姆定律

 **filament lamp** 灯丝灯泡

 **diode** 二极管

 **resistivity** 电阻率

 insulator 绝缘体			
 lattice vibration 晶格振动			
 scatters 散射			
 light-dependent resistor 光敏电阻			
 light intensity 光强			
 thermistor 热敏电阻			
 negative temperature coefficient 负温度系数			
 potential divider 分压器			
 breadboard 面包板			
 multimeter 万用表			
 internal resistance 内阻			
 cell 电池			
 terminal p.d. 端电压			
 open circuit 开路			
 short circuit 短路			

Chemistry

Topics 12–13 · Nitrogen and sulfur, An introduction to AS Level organic chemistry

 exhaust gases 尾气			
 photochemical smog 光化学烟雾			
 acid rain 酸雨			
 sulfur dioxide 二氧化硫			

 hydrocarbon 碳氢化合物			
 alkane 烷烃			
 functional group 官能团			
Σ general formula 通式			
 structural formula 结构式			
 displayed formula 展开式			
 skeletal formula 骨架式			
T nomenclature 命名法			
 homologous series 同系列			
 saturated 饱和			
 unsaturated 不饱和			
 homolytic fission 均裂			
 heterolytic fission 异裂			
 nucleophile 亲核试剂			

Biology

Topic 7 · Transport in plants

 phloem 韧皮部			
 assimilate 同化物			
 transverse section 横切面			
 dicotyledonous plant 双子叶植物			
 vessel 导管			
 lignin 木质素			

 sieve tube 筛管			
 sieve plate 筛板			
 companion cell 伴胞			
 vascular bundle 维管束			
 root hair cell 根毛细胞			
 apoplast pathway 质外体途径			
 symplast pathway 共质体途径			
 endodermis 内皮层			
 Casparian strip 凯氏带			
 suberin 木栓质			
 transpiration 蒸腾作用			
 evaporation 蒸发			
 water vapour 水蒸气			
 diffuse 扩散			
 stomata 气孔			
 atmosphere 大气			

Mathematics

Topic 4 · Mechanics

 displacement 位移			
 velocity 速度			
 acceleration 加速度			
 velocity-time graph 速度时间图			

↔ constant acceleration 匀加速

⇒ momentum 动量

↔ conservation of momentum 动量守恒

🍏 Newton's laws of motion 牛顿运动定律

🍷 mass 质量

🍷 weight 重力

Further Mathematics

Topic 3 · Further Mechanics

🍷 bounding parabola 包络抛物线

🍷 lamina 薄片

↔ coplanar forces 共面力

🍷 conical pendulum 圆锥摆

↑ normal contact force 法向接触力

Computer Science

Topics 9–10 · Algorithm Design and Problem-solving, Data Types and Structures

↗ Decomposition 分解

🍷 algorithm 算法

✓ unambiguous 无歧义

✓ deterministic 确定性

🍷 identifier table 标识符表

(x) variable 变量

 data type 数据类型			
 Pseudocode 伪代码			
 sequence 顺序			
 selection 选择			
 iteration 迭代			
 loop 循环			
= assignment 赋值			
 concatenation 拼接			
 structured English 结构化英语			
 flowchart 流程图			
 Stepwise refinement 逐步求精			
() logic statement 逻辑语句			
 Precedence 优先级			
 De Morgan's law 德摩根定律			
 procedure 过程			
[] array 数组			
# index 索引			
• element 元素			
[] bounds 边界			
 dimension 维度			
→ linear search 线性查找			

Economics

Topic 4 · The macroeconomy

 **consumption** 消费

 **net exports** 净出口

 **aggregate supply** 总供给

 **short-run aggregate supply** 短期总供给

 **long-run aggregate supply** 长期总供给

 **productive capacity** 生产能力

 **macroeconomic equilibrium** 宏观经济均衡

 **price level** 价格水平

 **real output** 实际产出

 **actual growth** 实际增长

 **potential growth** 潜在增长

 **productivity** 生产率

 **business cycle** 经济周期

 **boom** 繁荣

 **recession** 衰退