
Morning Reading 晨读

Grade 11 · AS · Week 3

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。

Two students measure the same pencil. One writes 14.32 cm, the other 14.29 cm. Who is right? **Accuracy** means being close to the true value; **precision** means getting almost the same reading every time. A ruler read from an angle gives a **parallax** error, and tiny hand movements cause **random error**. Repeating the measurement and taking the **mean** reduces random error. Serious laboratories also do **calibration**: they check their instruments against a known standard, and they quote a **percentage uncertainty** with every result.

Networks have their own quality measures. A **server** answers requests from many **client** machines; the delay before data starts to arrive is the **latency**. A school **local area network** connects nearby rooms, while the internet is a **wide area network** spanning the planet.

Adam Smith noticed that a pin factory with ten specialised workers made far more pins than ten generalists. **Specialisation** and the **division of labour** raise output, but workers then depend on trade with each other.

Talk about it 说一说:

1. Your three readings are 2.1 s, 2.4 s and 2.2 s. What do you report, and why?
2. Which school tasks would go faster with a division of labour? Which would not?

Physics

Topic 1 · Physical quantities and units

🛠 **calibration** 校准

👁 **parallax** 视差

📏 **accuracy** 准确度

⊙ precision 精密度			
↯ random error 随机误差			
⌒ instrument 仪器			
— mean 平均值			
± absolute uncertainty 绝对不确定度			
% percentage uncertainty 百分比不确定度			
⬢ derived quantity 导出量			
— diameter 直径			
⬢ volume 体积			
# significant figures 有效数字			
# scalar 标量			
↗ vector 矢量			
≡ density 密度			
⊕ electric charge 电荷			
→ displacement 位移			

Chemistry

Topics 1–2 · Atomic structure, Atoms, molecules and stoichiometry

○ sphere 球形			
✦ free radical 自由基			
⊙ unpaired electrons 未成对电子			
⚡ first ionisation energy 第一电离能			

↗ successive ionisation
energies 逐级电离能

↔ spin-pair repulsion 自旋
成对排斥

⚖ unified atomic mass
unit 统一原子质量单位

⚖ relative atomic mass 相
对原子质量

🔗 relative isotopic mass 相
对同位素质量

⚖ relative molecular mass
相对分子质量

⬡ molecule 分子

⚖ relative formula mass 相
对式量

mole 摩尔

Σ Avogadro constant 阿伏
伽德罗常量

⚖ molar mass 摩尔质量

🧪 compound 化合物

± ionic compound 离子化合
物

oxidation number 氧化数

Biology

Topics 1–2 · Cell structure, Biological molecules

🌀 centriole 中心粒

⊙ microtubule 微管

≡ cilia 纤毛

⊙ microvilli 微绒毛			
⇓ absorption 吸收			
☀ photosynthesis 光合作用			
▣ cell wall 细胞壁			
▤ cellulose 纤维素			
⌘ plasmodesmata 胞间连丝			
💧 vacuole 液泡			
⊖ tonoplast 液泡膜			
⊖ prokaryotic cell 原核细胞			
🦠 bacterium 细菌			
○ unicellular 单细胞			
▤ peptidoglycan 肽聚糖			
🦠 virus 病毒			
🚫 non-cellular 非细胞			
🧬 nucleic acid 核酸			
🛡 capsid 衣壳			
✉ envelope 包膜			
💧 phospholipid 磷脂			
🏠 host 宿主			
⬡ molecule 分子			

Mathematics

Topic 1 · Pure Mathematics 1

📦 composition 复合			
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 reflection 反射			
 transformations 变换			
 translation 平移			
 stretch 伸缩			
 Coordinate geometry 坐标几何			
 gradient 斜率			
 equation of a straight line 直线方程			
 parallel 平行			
 perpendicular 垂直			

Further Mathematics

Topic 1 · Further Pure Mathematics 1

 zero matrix 零矩阵			
 identity matrix 单位矩阵			
 determinant 行列式			
 singular matrix 奇异矩阵			
 inverse matrix 逆矩阵			

Computer Science

Topics 1–2 · Information representation, Communication

 entropy 熵			
 spatial 空间			
 temporal 时间			
 network 网络			

 local area network 局域网			
 latency 延迟			
 wide area network 广域网			
 server 服务器			
 client 客户端			
 peer-to-peer 对等网络			
 thin client 瘦客户端			
 thick client 胖客户端			
 topology 拓扑			
 bus 总线			
 star 星形			
 mesh 网状			
 fault-tolerant 容错			
 cloud computing 云计算			
 scalability 可扩展性			
 Ethernet 以太网			
 twisted-pair 双绞线			
 fibre-optic 光纤			
 network interface card 网络接口卡			
 MAC address MAC 地址			
 switch 交换机			

Economics

Topic 1 · Basic economic ideas and resource allocation

% interest 利息

👤 enterprise 企业家才能

↗ profit 利润

📦 non-renewable resources
不可再生资源

👤 entrepreneur 企业家

⌚ specialisation 专业化

👤 division of labour 劳动分
工

👤 worker 工人

↔ mobility 流动性

📦 occupational mobility 职
业流动性

📦 geographical mobility 地
理流动性

👤 allocate 配置

🏠 market economy 市场经
济

🏠 planned economy 计划经
济

🏠 command economy 指令
经济