
Morning Reading 晨读

Grade 10 · Week 6

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。

Music is physics you can hear. Sound travels as a **wave**. The **frequency** of the wave decides the pitch 音高: fast waves sound high, slow waves sound low. The **amplitude** decides how loud the sound is. Light is a **transverse wave**, like a rope shaken up and down, with a **crest** at the top and a **trough** at the bottom. Sound is a **longitudinal wave**: the air is pushed forward and back. The **wavelength** is the distance from one crest to the next.

Chemists count particles in a special way. Atoms are far too small to count one by one, so they use the **mole**. One mole of any substance contains the same huge number of particles, the **Avogadro constant**.

Why are concert tickets so expensive? Fans will pay almost any price, so demand is **inelastic**. But if the price of one brand of cola rises, people simply buy another brand: that demand is **elastic**. Sellers study **price elasticity of demand** before they set prices.

Talk about it 说一说:

1. Draw a wave in the air with your finger. Point to the crest, the trough, and one wavelength.
2. Name one product you would still buy if its price doubled. Why?

Physics

Topics 1-2 · Motion, forces and energy, Thermal physics

⚡ **watt** 瓦特

% **efficiency** 效率

↓ **pressure** 压强

↻ **pascal** 帕斯卡

↓ depth 深度			
≡ states of matter 物态			
→ motion 运动			
≡ density 密度			
📦 solid 固体			
💧 liquid 液体			
⇌ gas 气体			
🔊 vibrate 振动			
↔ kinetic energy 动能			
🔥 melting 熔化			
🍷 boiling 沸腾			
💧 condensation 凝结			
❄️ solidification 凝固			
🔍 kinetic particle model 分子动理论			
⋯ particle 粒子			
🔥 internal energy 内能			
🔗 transfer of thermal energy 热能传递			
⚡ thermal conductor 热导体			
🛡 thermal insulator 热绝缘体			

Chemistry

Topics 3-4 · Stoichiometry, Electrochemistry

◇ state symbols 状态符号

mole 摩尔

♁ amount of substance 物质的量

Σ Avogadro constant 阿伏伽德罗常数

⊕ solution 溶液

⊖ limiting reactant 限量反应物

℥ titration 滴定

⋮ solute 溶质

⚡ electrolysis 电解

↗ decomposition 分解

□ electrolytic cell 电解池

⚡ fuel cell 燃料电池

□ electrodes 电极

⬮ electrolyte 电解质

+ anode 阳极

- cathode 阴极

⊖ inert 惰性

◇ platinum 铂

◇ metals 金属

⬮ non-metals 非金属

☞ dilute 稀			
💧 concentrated 浓			

Biology

Topics 6-7 · Plant nutrition, Human nutrition

🍬 sucrose 蔗糖			
↕ phloem 韧皮部			
💧 nectar 花蜜			
🐝 pollination 传粉			
± nitrate ions 硝酸根离子			
⊕ magnesium ions 镁离子			
☀ light intensity 光照强度			
🏹 limiting factor 限制因素			
🧪 control 对照			
↔ gas exchange 气体交换			
🧠 indicator 指示剂			
🔄 adapted 适应			
🛡 cuticle 角质层			
🏠 epidermis 表皮			
🌿 mesophyll 叶肉			
🌿 palisade mesophyll 栅栏 叶肉			
🌿 spongy mesophyll 海绵叶 肉			
🌿 air spaces 气腔			

 stomata 气孔			
 guard cells 保卫细胞			
 vascular bundles 维管束			
 xylem 木质部			
 balanced diet 均衡饮食			
 calcium 钙			
 mineral ions 矿物质离子			
 iron 铁			
 fibre 膳食纤维			
 scurvy 坏血病			
 rickets 佝偻病			
 alimentary canal 消化道			
 oesophagus 食道			
 stomach 胃			
 small intestine 小肠			
 duodenum 十二指肠			
 ileum 回肠			
 large intestine 大肠			
 colon 结肠			

Mathematics

Topic 2 · Algebra and graphs

x^2 quadratic 二次			
 completing the square 配方法			

÷ algebraic fraction 分式

÷ rational expression 有理式

×² indices 指数

= equation 方程

— linear 一次

⊙ unknown 未知数

÷ fractional equation 分式方程

≡ simultaneous equations 联立方程

f quadratic formula 求根公式

↔ change the subject 公式变形

≠ inequality 不等式

number line 数轴

region 区域

sequence 数列

→ term-to-term rule 递推规则

Computer Science

Topic 3 · Hardware

actuator 执行器

projector 投影仪

inkjet printer 喷墨打印机

 laser printer 激光打印机			
 speaker 扬声器			
 Primary storage 主存储器			
 random access memory 随机存取存储器			
 read only memory 只读存储器			
 volatile 易失性			
 non-volatile 非易失性			
 Secondary storage 辅助存储器			
 magnetic storage 磁存储			
 optical storage 光存储			
 solid state storage 固态存储			
 flash memory 闪存			
 virtual memory 虚拟内存			
 network interface card 网络接口卡			
 media access control 介质访问控制			
 internet protocol 网际协议			
 router 路由器			

Economics

Topic 2 · The allocation of resources

⚙️ **determinants** 决定因素

↗️ **elastic** 富有弹性

🔒 **inelastic** 缺乏弹性

= **unit elastic** 单位弹性

💰 **total revenue** 总收益

💵 **total expenditure** 总支出

↕️ **price elasticity of supply**
供给价格弹性

🏠 **spare capacity** 闲置产能

📦 **stocks** 库存

🏠 **market economy** 市场经济

🏛️ **planned economy** 计划经济

🚫 **market failure** 市场失灵

🚫 **inefficient** 低效率

💵 **private cost** 私人成本

English

Topics 2-3 · Writing: purpose, audience and accuracy, Writing an informal email

📖 **vocabulary** 词汇

↔️ **synonyms** 同义词

📖 **grammar** 语法

🔤 **spelling** 拼写

🔗 punctuation 标点

✉ informal email 非正式电子邮件

🗨 prompts 提示
