
Morning Reading 晨读

Grade 10 · Week 8

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。

Invisible waves are all around you right now. **Radio waves** carry music to cars. **Microwaves** heat food and carry phone signals. **Ultraviolet** light from the Sun can burn your skin. Doctors use **X-rays** to see bones, and **gamma rays** to treat cancer. All of these can travel through empty space, a **vacuum**. Sound cannot: it always needs a **medium** such as air or water. Shout at a big wall and you hear an **echo**, your own sound wave reflected back.

Before money, people used **barter**: they traded fish for rice or shoes for tea. It was slow, because both sides had to want what the other had. **Money** solved this. It is a **medium of exchange** that everyone accepts, and a **store of value** you can keep for later.

Computers only understand **machine code**, patterns of ones and zeros. People write in a **high-level language** like Python, and a **translator** turns it into machine code.

Talk about it 说一说:

1. Name three invisible waves you used today and what they did for you.
2. Imagine one week without money. How would you get your lunch?

Physics

Topic 3 · Waves

^ crest 波峰			
v trough 波谷			
↑ amplitude 振幅			
↔ propagation 传播			
🌊 ripple tank 波纹水槽			

 reflection 反射			
 angle of reflection 反射角			
 angle of refraction 折射角			
 total internal reflection 全反射			
 critical angle 临界角			
 refraction 折射			
 angle of incidence 入射角			
 diffraction 衍射			
 light 光			
 normal 法线			
 plane mirror 平面镜			
 refractive index 折射率			
 optical fibre 光纤			
 converging lens 凸透镜			
 diverging lens 凹透镜			
 principal focus 焦点			
 focal length 焦距			
 real image 实像			

Chemistry

Topics 5–6 · Chemical energetics, Chemical reactions

 neutralisation 中和			
 enthalpy change 焓变			

 colliding 碰撞			
 physical change 物理变化			
 chemical change 化学变化			
 precipitate 沉淀			
 rate of reaction 反应速率			
 reversible reaction 可逆反应			
 forward reaction 正反应			
 reverse reaction 逆反应			
 redox reaction 氧化还原反应			
 collision theory 碰撞理论			
 surface area 表面积			
 catalyst 催化剂			
 enzymes 酶			
 syringe 注射器			
 hydrated 水合			
 anhydrous 无水			
 closed system 密闭系统			
 position of equilibrium 平衡位置			
 equilibrium 平衡			
 endothermic 吸热反应			

Biology

Topics 7-9 · Human nutrition, Transport in plants, Transport in animals

✂ **pepsin** 胃蛋白酶

✂ **trypsin** 胰蛋白酶

⚗ **alkaline** 碱性

⚖ **neutralises** 中和

⋮ **villi** 绒毛

⋮ **microvilli** 微绒毛

⋮ **capillaries** 毛细血管

🍼 **lacteal** 乳糜管

▤ **support** 支撑

🚰 **vessels** 导管

▦ **lignin** 木质素

📦 **cortex** 皮层

🧪 **stain** 染色剂

💧 **transpiration** 蒸腾作用

☁ **water vapour** 水蒸气

☁ **evaporates** 蒸发

⇌ **diffuses** 扩散

⇌ **wind speed** 风速

💧 **humidity** 湿度

↑ **transpiration pull** 蒸腾拉力

🌀 **forces of attraction** 吸引力

 column 水柱			
 wilts 萎蔫			
 translocation 转运			
 sources 源			
 sinks 库			
 circulatory system 循环系统			
 heart 心脏			
 pump 泵			
 valves 瓣膜			
 single circulation 单循环			
 mammal 哺乳动物			
 double circulation 双循环			
 pressure 压力			
 septum 隔膜			
 atrium 心房			
 ventricle 心室			

Mathematics

Topics 2-3 · Algebra and graphs, Coordinate geometry

 symmetry 对称			
 intercept 截距			
 parabola 抛物线			
 turning point 转折点			

— asymptote 渐近线			
Δ differentiation 微分			
$\nearrow$ tangent 切线			
$\nearrow$ derivative 导数			
$\square$ stationary point 驻点			
$\wedge$ maximum 最大值			
$\vee$ minimum 最小值			
f function 函数			
$\hookrightarrow$ domain 定义域			
$\updownarrow$ range 值域			
$\boxtimes$ inverse function 反函数			
$\boxplus$ composite function 复合函数			
+ axes 坐标轴			

Computer Science

Topics 4–5 · Software, The internet and its uses

$\langle \rangle$ programming language 编程语言			
$\langle \rangle$ high-level language 高级语言			
01 low-level language 低级语言			
$\boxtimes$ machine code 机器码			
$\langle \rangle$ assembly language 汇编语言			
$\oplus$ specific 特定的			

🗨️ translator 翻译程序

▶ interpreter 解释器

<> integrated development environment 集成开发环境

📄 code editor 代码编辑器

▶ run time environment 运行时环境

🔍 error diagnostics 错误诊断

✎ auto-completion 自动补全

🔧 auto-correction 自动纠错

≡ prettyprinting 美化打印

🌐 internet 互联网

🏗️ infrastructure 基础设施

🌐 world wide web 万维网

💻 websites 网站

🔗 uniform resource locator 统一资源定位符

Economics

Topics 2-3 · The allocation of resources, Microeconomic decision-makers

⬆ minimum price 最低价格

💰 indirect tax 间接税

📋 regulation 监管

📁 direct provision 直接提供

↔ barter 物物交换

 money 货币			
 medium of exchange 交换媒介			
 store of value 价值储藏			
 unit of account 记账单位			
 means of deferred payment 延期支付手段			
 durable 耐用的			
 portable 便于携带的			
 divisible 可分割的			
 central bank 中央银行			

English

Topics 3-4 · Writing an informal email, Writing a formal letter or email

 example 例子			
 detail 细节			
 semi-formal 半正式			
 head teacher 校长			
 manager 经理			
 event organiser 活动组织者			
 format 格式			