
Morning Reading 晨读

Grade 10 · Week 7

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。

Why does a straw look bent in a glass of water? Light changes direction when it moves from water into air. This is **refraction**. Glasses and cameras use a **converging lens** to bend light and make a clear **real image**. The distance from the lens to its **principal focus** is the **focal length**. Even the internet uses light: an **optical fibre** is a thin glass thread that carries light signals under the sea. The light cannot escape, because it always hits the wall of the fibre at more than the **critical angle**.

A computer is two things working together. **Hardware** is the physical machine you can touch. **Software** is the **programs** that tell it what to do. The most important program is the **operating system**: it starts the computer, manages memory, and runs your apps.

Markets are useful, but they are not perfect. A factory may make cheap toys but dirty the river. The factory pays its **private cost**, yet the village pays an **external cost**. Together these make the **social cost**. Economists call this **market failure**.

Talk about it 说一说:

1. Where have you seen refraction this week? Describe it.
2. A firework factory moves next to your school. What external costs does it bring?

Physics

Topics 3-6 · Waves, Space physics

田 **diffraction** 衍射

☀ **Light** 光

十 **normal** 法线

□ **plane mirror** 平面镜

 refractive index 折射率			
 converging lens 凸透镜			
 diverging lens 凹透镜			
 principal focus 焦点			
 focal length 焦距			
 real image 实像			
 virtual image 虚像			
 magnifying glass 放大镜			
 prism 棱镜			
 spectrum 光谱			
 electromagnetic spectrum 电磁波谱			
 dispersion 色散			
 monochromatic 单色			
 vacuum 真空			
 radio waves 无线电波			
 microwaves 微波			
 ultraviolet 紫外线			

Chemistry

Topics 4–10 · Electrochemistry, Chemical energetics, Chemistry of the environment

 bromine 溴			
 chlorine 氯气			
 sulfuric acid 硫酸			
 oxygen 氧气			

 external circuit 外电路			
↓ reduction 还原			
↑ oxidation 氧化			
÷ half-equation 半反应式			
 copper 铜			
 electroplating 电镀			
 corrosion 腐蚀			
 pollutants 污染物			
 cancer 癌症			
 exothermic reaction 放热反应			
 endothermic reaction 吸热反应			
 reaction pathway diagram 反应进程图			
 activation energy 活化能			
 bond energy 键能			
 bond breaking 断键			
 bond making 成键			
 surroundings 环境			
 combustion 燃烧			

Biology

Topic 7 · Human nutrition

↓ rectum 直肠			
⊙ anus 肛门			

 salivary glands 唾液腺			
 pancreas 胰腺			
 liver 肝脏			
 gall bladder 胆囊			
 ingestion 摄入			
 nutrients 营养物质			
 assimilation 同化			
 egestion 排遗			
 faeces 粪便			
 teeth 牙齿			
 incisors 门齿			
 canines 犬齿			
 premolars 前臼齿			
 molars 臼齿			
 enamel 牙釉质			
 dentine 牙本质			
 pulp 牙髓			
 nerves 神经			
 blood vessels 血管			
 cement 牙骨质			
 gums 牙龈			
 bile 胆汁			
 emulsifies 乳化			
 lipase 脂肪酶			

 insoluble 不溶性			
 soluble 可溶性			
 amylase 淀粉酶			
 protease 蛋白酶			
 hydrochloric acid 盐酸			
 gastric juice 胃液			
 microorganisms 微生物			
 acidic 酸性			
 maltose 麦芽糖			
 maltase 麦芽糖酶			
 epithelium 上皮			

Mathematics

Topic 2 · Algebra and graphs

 cubic 三次			
 exponential sequence 指数数列			
 direct proportion 正比例			
 constant 常数			
 inverse proportion 反比例			
 gradient 斜率			
 rate of change 变化率			
 travel graph 行程图			
 conversion graph 换算图			

 acceleration 加速度			
 deceleration 减速度			
 distance 距离			
 table of values 数值表			
 coordinates 坐标			
+ axis 坐标轴			
 roots 根			
× intersection point 交点			

Computer Science

Topic 4 · Software

 Hardware 硬件			
 physical 物理的			
 Software 软件			
<> programs 程序			
 System software 系统软件			
 operating system 操作系统			
 compiler 编译器			
 linker 链接器			
 device driver 设备驱动程序			
 utility software 实用程序			
 Application software 应用软件			

 word processing 文字处理			
 spreadsheet 电子表格			
 database management system 数据库管理系统			
 web browser 网页浏览器			
 user interface 用户界面			
 peripherals 外围设备			
 multitasking 多任务处理			
 platform 平台			
 interrupt 中断			

Economics

Topic 2 · The allocation of resources

 external cost 外部成本			
 social cost 社会成本			
 private benefit 私人效益			
 external benefit 外部效益			
 social benefit 社会效益			
 merit goods 有益物品			
 demerit goods 有害物品			
 public goods 公共物品			
 monopoly 垄断			
 mixed economy 混合经济			
 private sector 私营部门			

 public sector 公共部门			
 intervention 干预			
 maximum price 最高价格			

English

Topic 3 · Writing an informal email

 tone 语气			
 greeting 问候语			
 closing 结束语			
 paragraphs 段落			
 short forms 缩略形式			
 developed 展开的			
 reason 原因			