
Morning Reading 晨读

Grade 10 · 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。

Where does electricity come from? In a power station, a huge **coil** of wire spins inside a magnetic field. Moving a wire through a magnetic field creates a current. This is **electromagnetic induction**, and the machine is called an **a.c. generator**. Wind turbines, coal plants and dams all work this same way: something spins the coil, and electricity flows out.

Machines are also learning to think. **Expert systems** ask questions and give advice, like a doctor's assistant. **Self-driving cars** read the road with cameras and sensors. Today's systems are **narrow AI**: each one is clever at a single task, but it cannot do anything else.

How do we know if a country is doing well? Economists add up the value of everything it makes in a year: the **gross domestic product**. The economy moves in a **business cycle**: a **boom** with many jobs, then sometimes a **recession** when spending falls, and later a **recovery**. The central bank uses **monetary policy**, mainly the interest rate, to steady the ride.

Talk about it 说一说:

1. Trace the energy: how does a windy day become the light in your room?
2. Would you trust a self-driving taxi today? Give one reason for and one against.

Physics

Topic 4 · Electricity and magnetism

≡ **series** 串联

= **parallel** 并联

⦿ **junction** 节点

 hazard 危险			
 insulation 绝缘层			
 overheating 过热			
 damp 潮湿			
 overloading 过载			
 socket 插座			
 live wire 火线			
 neutral wire 零线			
 earth wire 地线			
 casing 外壳			
 earthed 接地			
 double-insulated 双重绝缘			
 solenoid 螺线管			
 coil 线圈			
 primary coil 原线圈			
 secondary coil 副线圈			
 loudspeaker 扬声器			
 electromagnetic induction 电磁感应			
 a.c. generator 交流发电机			

Chemistry

Topics 4-10 · Electrochemistry, Metals, Chemistry of the environment

 lead 铅			
 aluminium 铝			
 magnesium 镁			
 rusting 生锈			
 rust 铁锈			
 barrier methods 隔离法			
 galvanising 镀锌			
 sacrificial protection 牺牲保护			
 ore 矿石			
 hematite 赤铁矿			
 blast furnace 高炉			
 limestone 石灰石			
 slag 炉渣			
 bauxite 铝土矿			
 cryolite 冰晶石			
 distilled water 蒸馏水			
 impurities 杂质			
 sewage 污水			
 microbes 微生物			
 phosphates 磷酸盐			
 aquatic life 水生生物			

💎 minerals 矿物质

Biology

Topics 14–16 · Coordination and response, Drugs, Reproduction

🕒 duration 持续时间

⚖️ homeostasis 稳态

↺ negative feedback 负反馈

🎯 set point 设定点

🩺 diabetes 糖尿病

💧 sweat glands 汗腺

💧 sweating 出汗

↑↓ hair erector muscles 立毛肌

🧴 fatty tissue 脂肪组织

🛡️ insulation 隔热

🩺 arterioles 小动脉

[] vasodilation 血管舒张

🌀 shiver 颤抖

⚡ vasoconstriction 血管收缩

↗ tropism 向性

↓ gravitropism 向地性

↓ gravity 重力

☀ phototropism 向光性

🌱 auxin 生长素

🌱 shoot 嫩枝

↑ elongate 伸长

💊 drug 药物

🧪 chemical reactions 化学反应

💊 antibiotics 抗生素

🦠 infections 感染

🛡️ resistant 耐药

📦 asexual reproduction 无性生殖

👤 parent 亲本

👶 offspring 后代

♂ sexual reproduction 有性生殖

↗ fusion 融合

🎯 nuclei 细胞核

⊙ zygote 合子

↗ fertilisation 受精

↕ variation 变异

○ haploid 单倍体

🧬 chromosomes 染色体

Mathematics

Topics 4–5 · Geometry, Mensuration

📦 cube 立方体

📦 cuboid 长方体

 prism 棱柱			
 cylinder 圆柱			
 pyramid 棱锥			
 cone 圆锥			
 sphere 球			
 hemisphere 半球			
 frustum 平截头体			
 face 面			
 edge 棱			
 surface 表面			
 metric 公制			
 capacity 容量			
 perimeter 周长			
 height 高			

Computer Science

Topic 7

 design 设计			
 coding 编码			
 testing 测试			
 abstraction 抽象			
 decomposition 分解			
 sub-systems 子系统			
 structure diagram 结构图			

 iterative testing 迭代测试			
 test data 测试数据			
 flowchart 流程图			
 pseudocode 伪代码			
 algorithm 算法			
 input 输入			
 processing 处理			
 output 输出			
 validation 验证			
 range check 范围检查			
 length check 长度检查			
 type check 类型检查			
 presence check 存在性检查			

Economics

Topic 4 · Government and the macroeconomy

 Supply-side policy 供给侧政策			
 privatisation 私有化			
 deregulation 放松管制			
 incentives 激励			
 gross domestic product 国内生产总值			
 Real 实际			
 business cycle 经济周期			

 boom 繁荣			
 recession 衰退			
 slump 萧条			
 recovery 复苏			
 living standards 生活水平			
 claimant count 失业救济申领人数			
 unemployment benefit 失业救济金			

English

Topic 9 · Listening skills

 recording 录音			
 specific 具体的			
 directions 方向			
 feelings 感受			
 connect 连接			
 suggests 暗示			