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# Morning Reading 晨读

Grade 10 · Week 12

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*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

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*Read the passage aloud twice.* 把短文朗读两遍。

In a modern car factory, **robots** do the heavy work. A robot has a **mechanical** arm, sensors, and a **microprocessor** that follows **programmable instructions**. Robots weld 焊接 the same joint perfectly, thousands of times, without getting tired. At home, smaller machines help too: a robot **vacuum cleaner** finds its own way around your floor. These are **domestic appliances** with tiny computers inside.

Electric circuits this week: in a **series** circuit, the same current flows through every part, and one broken bulb switches off the whole string of lights. In a **parallel** circuit, each bulb has its own path, so the others stay on. A **fuse** is a thin wire that melts if the current gets dangerously large, protecting the circuit.

When prices in a country keep rising year after year, we call it **inflation**. A government can respond with **fiscal policy**: changing **taxation** and **government spending** through its yearly **budget**.

*Talk about it 说一说:*

1. Which jobs in your city are now done by robots? Which jobs are safe, and why?
2. Your holiday lights use a series circuit. Why is that a bad design?

## Physics

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*Topics 2-4 · Thermal physics, Electricity and magnetism*

↘ **inversely proportional**

成反比

⊙ **cross-sectional area** 横截

面积

⊞ **resistor** 电阻器

 **variable resistor** 可变电阻器

 **light-dependent resistor** 光敏电阻

 **light-emitting diode** 发光二极管

 **diode** 二极管

 **filament lamp** 灯丝灯泡

 **kilowatt-hour** 千瓦时

 **appliance** 电器

 **heater** 加热器

 **cell** 电池

 **battery** 电池组

 **switch** 开关

 **trip switch** 跳闸开关

 **fuse** 保险丝

 **fuse rating** 额定值

 **thermistor** 热敏电阻

 **relay** 继电器

 **motor** 电动机

 **d.c. motor** 直流电动机

 **bell** 电铃

 **transformer** 变压器

# Chemistry

Topics 4-9 · Electrochemistry, The Periodic Table, Metals

≡ variable 可变

# oxidation numbers 氧化数

☒ unreactive 不活泼

○ monatomic 单原子

⌋ thermal conductivity 导热性

↗ brittle 易碎

⌊ acids 酸

☁ steam 蒸汽

⊗ oxide 氧化物

≡ oxide layer 氧化层

⊗ calcium oxide 氧化钙

⌋ calcium 钙

⊗ alloy 合金

💎 brass 黄铜

💎 zinc 锌

🛡 stainless steel 不锈钢

💎 chromium 铬

💎 nickel 镍

⬡ carbon 碳

☠ carbon monoxide 一氧化碳

⚗ reactivity series 金属活动性顺序

⊗ hydrogen 氢气

## Biology

Topic 14 · Coordination and response

💧 gland 腺体

⚡ synapse 突触

⊙ vesicles 囊泡

⚡ neurotransmitter 神经递质

— synaptic gap 突触间隙

🔑 receptor proteins 受体蛋白

⇌ diffuse 扩散

👁 sense organs 感觉器官

⊙ cornea 角膜

↷ refracts 折射

🌀 iris 虹膜

○ pupil 瞳孔

👁 lens 晶状体

[ ] retina 视网膜

👁 optic nerve 视神经

👁 blind spot 盲点

↔ antagonistic 拮抗

○ circular muscles 环肌

|                                                                                                            |  |  |  |
|------------------------------------------------------------------------------------------------------------|--|--|--|
|  radial muscles 辐射肌       |  |  |  |
|  accommodation 视觉调节       |  |  |  |
|  ciliary muscles 睫状肌      |  |  |  |
|  suspensory ligaments 悬韧带 |  |  |  |
|  rods 视杆细胞                |  |  |  |
|  vision 视觉                |  |  |  |
|  cones 视锥细胞               |  |  |  |
|  fovea 中央凹                |  |  |  |
|  hormone 激素               |  |  |  |
|  target organs 靶器官        |  |  |  |
|  endocrine glands 内分泌腺  |  |  |  |
|  adrenal glands 肾上腺     |  |  |  |
|  adrenaline 肾上腺素        |  |  |  |
|  insulin 胰岛素            |  |  |  |
|  glucagon 胰高血糖素         |  |  |  |
|  testes 睾丸              |  |  |  |
|  testosterone 睾酮        |  |  |  |
|  ovaries 卵巢             |  |  |  |
|  oestrogen 雌激素          |  |  |  |

## Mathematics

### Topic 4 · Geometry

 **arc** 弧

 **sector** 扇形

 **segment** 弓形

 **semicircle** 半圆

 **cyclic quadrilateral** 圆内接四边形

 **alternate segment theorem** 弦切角定理

 **similar** 相似

 **scale factor** 比例因子

**=** **congruent** 全等

 **bearing** 方位角

 **clockwise** 顺时针

 **construct** 作图

 **compasses** 圆规

 **net** 展开图

 **scale drawing** 比例图

 **solids** 几何体

## Computer Science

### Topics 6–7 · Automated and emerging technologies

 **domestic appliances** 家用电器

 **vacuum cleaner** 吸尘器

🚫 **lack of independent decision-making** 缺乏独立决策

🧠 **Artificial intelligence** 人工智能

▶ **simulation** 模拟

☰ **rules** 规则

🧠 **reason** 推理

🚩 **draw conclusions** 得出结论

❓ **approximate** 近似的

✓ **definite** 确定的

📖 **learn** 学习

↔ **adapt** 适应

🧠 **expert systems** 专家系统

🗣️ **natural language processing** 自然语言处理

🚗 **self-driving cars** 自动驾驶汽车

🧠 **narrow AI** 弱人工智能

🧠 **general AI** 通用人工智能

🧠 **strong AI** 强人工智能

↔ **program development life cycle** 程序开发生命周期

🔍 **analysis** 分析

## Economics

Topic 4 · Government and the macroeconomy

✂ conflict 冲突

🏛 Fiscal policy 财政政策

💰 government spending 政府支出

💵 taxation 税收

📊 budget 预算

↘ budget deficit 预算赤字

↗ budget surplus 预算盈余

💵 direct tax 直接税

↗ progressive tax 累进税

↘ regressive tax 累退税

= proportional tax 比例税

🏧 Monetary policy 货币政策

💰 money supply 货币供给

↗ invest 投资

## English

Topics 7-8 · Writing a review, Writing an essay

💡 examples 例子

📊 evaluate 评价

👍 recommendation 建议

📄 essay 议论文

🗨 discursive 论述的

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🗨 argumentative 议论的

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≡ body 主体

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