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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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*Topic 4 · Electricity and magnetism*

⚡ **transformer** 变压器

⋮ **series** 串联

= **parallel** 并联

⚡ **junction** 节点

|                                                                                                                  |  |  |  |
|------------------------------------------------------------------------------------------------------------------|--|--|--|
|  <b>hazard</b> 危险               |  |  |  |
|  <b>insulation</b> 绝缘层          |  |  |  |
|  <b>overheating</b> 过热          |  |  |  |
|  <b>damp</b> 潮湿                 |  |  |  |
|  <b>overloading</b> 过载          |  |  |  |
|  <b>socket</b> 插座               |  |  |  |
|  <b>live wire</b> 火线            |  |  |  |
|  <b>neutral wire</b> 零线         |  |  |  |
|  <b>earth wire</b> 地线           |  |  |  |
|  <b>casing</b> 外壳               |  |  |  |
|  <b>earthed</b> 接地              |  |  |  |
|  <b>double-insulated</b> 双重绝缘 |  |  |  |
|  <b>solenoid</b> 螺线管          |  |  |  |
|  <b>coil</b> 线圈               |  |  |  |
|  <b>primary coil</b> 原线圈      |  |  |  |
|  <b>secondary coil</b> 副线圈    |  |  |  |

## Chemistry

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

|                                                                                                                  |  |  |  |
|------------------------------------------------------------------------------------------------------------------|--|--|--|
|  <b>variable</b> 可变           |  |  |  |
|  <b>oxidation numbers</b> 氧化数 |  |  |  |
|  <b>unreactive</b> 不活泼        |  |  |  |
|  <b>monatomic</b> 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                |  |  |  |

|                                                                                                                |  |  |  |
|----------------------------------------------------------------------------------------------------------------|--|--|--|
|  <b>cones</b> 视锥细胞            |  |  |  |
|  <b>fovea</b> 中央凹             |  |  |  |
|  <b>hormone</b> 激素            |  |  |  |
|  <b>target organs</b> 靶器官     |  |  |  |
|  <b>endocrine glands</b> 内分泌腺 |  |  |  |
|  <b>adrenal glands</b> 肾上腺    |  |  |  |
|  <b>adrenaline</b> 肾上腺素       |  |  |  |
|  <b>insulin</b> 胰岛素           |  |  |  |
|  <b>glucagon</b> 胰高血糖素        |  |  |  |
|  <b>testes</b> 睾丸             |  |  |  |
|  <b>testosterone</b> 睾酮       |  |  |  |
|  <b>ovaries</b> 卵巢          |  |  |  |
|  <b>oestrogen</b> 雌激素       |  |  |  |

## Mathematics

### *Topic 4 · Geometry*

|                                                                                                                            |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  <b>arc</b> 弧                           |  |  |  |
|  <b>sector</b> 扇形                       |  |  |  |
|  <b>segment</b> 弓形                      |  |  |  |
|  <b>semicircle</b> 半圆                   |  |  |  |
|  <b>cyclic quadrilateral</b> 圆内接四边形     |  |  |  |
|  <b>alternate segment theorem</b> 弦切角定理 |  |  |  |
|  <b>similar</b> 相似                      |  |  |  |

|                                                                                                            |  |  |  |
|------------------------------------------------------------------------------------------------------------|--|--|--|
|  <b>scale factor</b> 比例因子 |  |  |  |
| <b>= congruent</b> 全等                                                                                      |  |  |  |
|  <b>bearing</b> 方位角       |  |  |  |
|  <b>clockwise</b> 顺时针     |  |  |  |
|  <b>construct</b> 作图      |  |  |  |
|  <b>compasses</b> 圆规      |  |  |  |
|  <b>net</b> 展开图           |  |  |  |
|  <b>scale drawing</b> 比例图 |  |  |  |
|  <b>solids</b> 几何体        |  |  |  |

## Computer Science

*Topics 6–7 · Automated and emerging technologies*

|                                                                                                                                       |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  <b>domestic appliances</b> 家用电器                   |  |  |  |
|  <b>vacuum cleaner</b> 吸尘器                         |  |  |  |
|  <b>lack of independent decision-making</b> 缺乏独立决策 |  |  |  |
|  <b>Artificial intelligence</b> 人工智能               |  |  |  |
|  <b>simulation</b> 模拟                              |  |  |  |
|  <b>rules</b> 规则                                   |  |  |  |
|  <b>reason</b> 推理                                  |  |  |  |
|  <b>draw conclusions</b> 得出结论                      |  |  |  |
|  <b>approximate</b> 近似的                            |  |  |  |
|  <b>definite</b> 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

⚖ argumentative 议论的

≡ body 主体