

Morning Reading 晨读

Grade 10 · Week 9

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。

Take off a wool hat on a dry winter day and your hair stands up. Rubbing gives your hair extra **electric charge**. Charges push and pull: like charges **repel**, opposite charges **attract**. When charge flows through a wire, we call it an **electric current**. A battery gives **direct current**, which flows one way. The sockets at home give **alternating current**, which changes direction many times each second.

When you type an address into a browser, you use the **world wide web**. Every device on the **internet** has an **IP address**, like a house number. Your browser asks a **web server** for the page, and the server sends it back to you.

Where does your money sleep at night? In a bank. **Commercial banks** keep savings safe and lend money to firms. The **central bank** is the bank of the whole country: it prints the money and sets the **interest rate**, the price of **borrowing**.

Talk about it 说一说:

1. Why does your hair stand up after you take off a wool hat?
2. If the interest rate rises, will people save more or borrow more? Why?

Physics

Topics 3-4 · Waves, Electricity and magnetism

 **virtual image** 虚像
/ˈvɜːtʃʊəl ˈɪmɪdʒ/

 **magnifying glass** 放大镜
/ˈmæɡnɪfaɪɪŋ ɡlɑːs/

 **prism** 棱镜
/ˈprɪzəm/

 **spectrum** 光谱
/ˈspektrəm/

 **electromagnetic spectrum** 电磁波谱
/ɪˌlektɹəʊmægˈnetɪk ˈspektrəm/

 **dispersion** 色散
/dɪˈspɜːʃn/

 **monochromatic** 单色
/ˌmɒnəʊkɹəʊˈmætɪk/

 **vacuum** 真空
/ˈvækjuːm/

 **radio waves** 无线电波
/ˈreɪdiəʊ weɪvz/

 **ultraviolet** 紫外线
/ʊlˈtrəˈvaɪəlt/

 **X-rays** X 射线
/eks reɪz/

 **gamma rays** 伽马射线
/ˈɡæmə reɪz/

 **sound** 声音
/saʊnd/

 **compression** 压缩
/kəmˈpreʃn/

 **rarefaction** 稀疏
/ˈreəriˈfeɪʃn/

 medium 介质			
<i>/ˈmiːdiəm/</i>			
 echo 回声			
<i>/ˈekəʊ/</i>			
 magnet 磁体			
<i>/ˈmæɡnɪt/</i>			
 temporary magnet 临时磁体			
<i>/ˈtempəri ˈmæɡnɪt/</i>			
 permanent magnet 永磁体			
<i>/ˈpɜːmənənt ˈmæɡnɪt/</i>			
 north pole 北极			
<i>/nɔːθ pəʊl/</i>			
 south pole 南极			
<i>/saʊθ pəʊl/</i>			
 magnetic material 磁性材料			
<i>/mæɡˈnetɪk məˈtɪəriəl/</i>			

Chemistry

Topics 6–7 · Chemical reactions, Acids, bases and salts

 exothermic 放热反应			
<i>/egzəˈðɜːmɪk/</i>			
 Haber process 哈伯法			
<i>/ˈheɪbə ˈprəʊses/</i>			
 Contact process 接触法			
<i>/ˈkɒntækt ˈprəʊses/</i>			
 methane 甲烷			
<i>/ˈmiːθeɪn/</i>			
 nitrogen 氮气			
<i>/ˈnaɪtrədʒn/</i>			
 iron 铁			
<i>/aɪən/</i>			

 sulfur 硫			
<i>/ˈsʌlfɜː/</i>			
 vanadium(V) oxide 五氧化二钒			
<i>/væˈneɪdiəm ˈɒksaɪd/</i>			
 compromise 折中			
<i>/ˈkɒmprəmaɪz/</i>			
 oxidation number 氧化数			
<i>/ˌɒksɪˈdeɪʃn ˈnʌmbə/</i>			
 oxidising agent 氧化剂			
<i>/ˈɒksɪdaɪzɪŋ ˈeɪdʒənt/</i>			
 reducing agent 还原剂			
<i>/rɪˈdjuːsɪŋ ˈeɪdʒənt/</i>			
 potassium manganate(VII) 高锰酸钾			
<i>/pəˈtæsiəm ˈmæŋɡəneɪt/</i>			
 potassium iodide 碘化钾			
<i>/pəˈtæsiəm ˈaɪədaɪd/</i>			
 iodine 碘			
<i>/ˈaɪədiːn/</i>			
 acid 酸			
<i>/ˈæsɪd/</i>			
 strong acid 强酸			
<i>/strɒŋ ˈæsɪd/</i>			
 hydrochloric acid 盐酸			
<i>/ˈhaɪdrəˈkloːrɪk ˈæsɪd/</i>			
 weak acid 弱酸			
<i>/wiːk ˈæsɪd/</i>			
 ethanoic acid 乙酸			
<i>/ˌeθəˈnɔɪk ˈæsɪd/</i>			
 salt 盐			
<i>/sɒlt/</i>			
 carbonates 碳酸盐			
<i>/ˈkɑːbəneɪts/</i>			

Biology

Topics 7–10 · Human nutrition, Transport in animals, Diseases and immunity

♥ coronary arteries 冠状动脉			
/ˈkɒrənəri ˈɑːtəriz/			
💧 oxygenated blood 含氧血			
/ˈɒksɪdʒəneɪtɪd bləd/			
🩸 deoxygenated blood 缺氧血			
/diːˈɒksɪdʒəneɪtɪd bləd/			
🏠 atrioventricular valves 房室瓣			
/ˌeɪtrɪˌəʊvənˈtrɪkjələ vælvz/			
♥ semilunar valves 半月瓣			
/ˌsemiˈluːnə vælvz/			
✂️ contract 收缩			
/ˈkɒntrækt/			
📶 pulse 脉搏			
/pʌls/			
💓 heart rate 心率			
/hɑːt reɪt/			
♥ coronary heart disease 冠心病			
/ˈkɒrənəri hɑːt diˈziːz/			
⚠️ risk factors 风险因素			
/rɪsk ˈfæktəz/			
◯ lumen 管腔			
/ˈluːmen/			
🩸 arteries 动脉			
/ˈɑːtəriz/			
🩸 veins 静脉			
/veɪnz/			
➦ aorta 主动脉			
/eɪˈɔːtə/			

↓ vena cava 腔静脉			
/ˈviːnə ˈkɑːvə/			
↑ pulmonary artery 肺动脉			
/ˈpʌlmənəri ˈɑːtəri/			
← pulmonary vein 肺静脉			
/ˈpʌlmənəri veɪn/			
💓 renal artery 肾动脉			
/ˈriːnl ˈɑːtəri/			
💧 renal vein 肾静脉			
/ˈriːnl veɪn/			
➔ hepatic artery 肝动脉			
/heɪˈpætɪk ˈɑːtəri/			
↓ hepatic vein 肝静脉			
/heɪˈpætɪk veɪn/			
🩸 hepatic portal vein 肝门静脉			
/heɪˈpætɪk ˈpɔːtl veɪn/			
💧 haemoglobin 血红蛋白			
/hiːməˈɡləʊbɪn/			
🩸 white blood cells 白细胞			
/waɪt bləd selz/			
🔱 platelets 血小板			
/ˈpleɪtlɪts/			
⦿ clot 凝血			
/klot/			
💧 plasma 血浆			
/ˈplæzmə/			
🩸 urea 尿素			
/juːˈriə/			
⚡ hormones 激素			
/ˈhɔːməʊnz/			
🦠 pathogens 病原体			
/ˈpæθədʒɪnz/			
🩸 phagocytes 吞噬细胞			
/ˈfæɡəsaɪts/			

 phagocytosis 吞噬作用			
<i>/ˈfæɡəsiˈtaʊsɪs/</i>			
 lymphocytes 淋巴细胞			
<i>/ˈlɪmfəsaɪts/</i>			
 antibodies 抗体			
<i>/ˈæntɪbədɪz/</i>			
 fibrinogen 纤维蛋白原			
<i>/ˈfɪbrɪnədʒɪn/</i>			
 fibrin 纤维蛋白			
<i>/ˈfɪbrɪn/</i>			
 pathogen 病原体			
<i>/ˈpæθədʒɪn/</i>			

Mathematics

Topics 3–4 · Coordinate geometry, Geometry

 horizontal 水平			
<i>/ˌhɒrɪˈzɒntl/</i>			
 vertical 竖直			
<i>/ˈvɜːtɪkl/</i>			
 origin 原点			
<i>/ˈɒrɪdʒɪn/</i>			
 quadrants 象限			
<i>/ˈkwɒdrənts/</i>			
 line segment 线段			
<i>/laɪn ˈseɡmənt/</i>			
 length 长度			
<i>/leŋθ/</i>			
 Pythagoras' theorem 勾股定理			
<i>/paɪˈθæɡərəs ˈθɪərəm/</i>			
 midpoint 中点			
<i>/ˈmɪdpoɪnt/</i>			
 parallel 平行			
<i>/ˈpærəlel/</i>			

 perpendicular 垂直			
<i>/ˌpɜːpənˈdɪkjələ/</i>			
 right angle 直角			
<i>/raɪt ˈæŋɡl/</i>			
 perpendicular bisector 垂直平分线			
<i>/ˌpɜːpənˈdɪkjələ baɪˈsektə/</i>			
 vertex 顶点			
<i>/ˈvɜːteks/</i>			
 acute angle 锐角			
<i>/əˈkjʊt ˈæŋɡl/</i>			
 obtuse angle 钝角			
<i>/ɒbˈtjuːs ˈæŋɡl/</i>			
 reflex angle 优角			
<i>/ˈrɪˌfleks ˈæŋɡl/</i>			
 vertically opposite angles 对顶角			
<i>/ˈvɜːtɪkli ˈɒpəzɪt ˈæŋɡlz/</i>			

Computer Science

Topic 5 · The internet and its uses

 rendering 渲染			
<i>/ˈrendərɪŋ/</i>			
 hypertext markup language 超文本标记语言			
<i>/ˈhaɪpətekst ˈmɑːkəp ˈlæŋɡwɪdʒ/</i>			
 IP address 网际协议地址			
<i>/aɪ ˈpiː əˈdres/</i>			
 domain name service 域名服务			
<i>/dəˈmeɪn neɪm ˈsɜːvɪs/</i>			
 web server 网页服务器			
<i>/web ˈsɜːvə/</i>			
 session 会话			
<i>/ˈseʃn/</i>			

 persistent 持久			
<i>/pə'sistent/</i>			
 user preferences 用户偏好			
<i>/ˈjuːzə 'prefrənsɪz/</i>			
 digital currency 数字货币			
<i>/ˈdɪdʒɪtl 'kʌrənsi/</i>			
 electronic form 电子形式			
<i>/ɪlek'trɒnɪk fɔ:m/</i>			
 blockchain 区块链			
<i>/'blɒkʃeɪn/</i>			
 digital ledger 数字账本			
<i>/ˈdɪdʒɪtl 'ledʒə/</i>			
 transaction 交易			
<i>/træn'sækʃn/</i>			
 timestamp 时间戳			
<i>/ˈtaɪmstæmp/</i>			
 hash value 哈希值			
<i>/hæʃ 'væljuː/</i>			
 cyber security 网络安全			
<i>/ˈsaɪbə sɪ'kjuəriti/</i>			
 brute force attack 暴力破解			
<i>/'bru:t fɔ:s ə'tæk/</i>			
 data interception 数据拦截			
<i>/'deɪtə ɪntə'sepʃn/</i>			
 distributed denial of service 分布式拒绝服务			
<i>/'dɪstrɪbjʊtɪd dɪ'naɪəl ɒv 'sɜ:vɪs/</i>			
 hacking 黑客攻击			
<i>/'hækɪŋ/</i>			

Economics

Topic 3 · Microeconomic decision-makers

 interest rate 利率			
<i>/ˈɪntrest reɪt/</i>			
 commercial banks 商业银行			
<i>/kə'mɜ:ʃl bæŋks/</i>			
 household 家庭			
<i>/'haʊshəʊld/</i>			
 saving 储蓄			
<i>/'seɪvɪŋ/</i>			
 borrowing 借贷			
<i>/'bɒrəʊɪŋ/</i>			
 confidence 信心			
<i>/'kɒnfɪdəns/</i>			
 occupation 职业			
<i>/ˌɒkju'peɪʃn/</i>			
 wage 工资			
<i>/weɪdʒ/</i>			
 skill 技能			
<i>/skɪl/</i>			
 qualifications 资格			
<i>/'kwɒlɪfɪ'keɪʃnz/</i>			
 trade unions 工会			
<i>/'treɪd 'ju:niənz/</i>			
 discrimination 歧视			
<i>/dɪ'skrɪmɪ'neɪʃn/</i>			
 division of labour 劳动分工			
<i>/dɪ'vɪʒn ɒv 'leɪbə/</i>			
 specialisation 专业化			
<i>/'speʃləlaɪ'zeɪʃn/</i>			

English

Topics 4-5 · Writing a formal letter or email, Writing a report

 polite 礼貌			
/pəˈlaɪt/			
 grateful 感激			
/ˈɡreɪtfl/			
 report 报告			
/rɪˈpɔ:t/			
 event 事件			
/ɪˈvent/			
 situation 情况			
/ˌsɪtʃuːˈeɪʃn/			
 facts 事实			
/fækts/			
 factual 事实性的			
/ˈfæktʃuəl/			