

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			
/ˈsiəriːz/			
= parallel 并联			
/ˈpærəlel/			
⚡ junction 节点			
/ˈdʒʌŋkʃn/			
⚠ hazard 危险			
/ˈhæzəd/			
🛡 insulation 绝缘层			
/ˈɪnsjuːˈleɪʃn/			
🔥 overheating 过热			
/ˌoʊvəˈhiːtɪŋ/			
💧 damp 潮湿			
/dæmp/			
🔌 overloading 过载			
/ˌoʊvəˈləʊdɪŋ/			
🔌 socket 插座			
/ˈsɒkɪt/			
⚡ live wire 火线			
/laɪv ˈwaɪə/			
— neutral wire 零线			
/ˈnjuːtrəl ˈwaɪə/			
⊕ earth wire 地线			
/ɜːθ ˈwaɪə/			
📦 casing 外壳			
/ˈkeɪsɪŋ/			
⊕ earthed 接地			
/ɜːθt/			
🛡 double-insulated 双重绝缘			
/ˈdʌbl ˈɪnsjuːleɪtɪd/			

 solenoid 螺线管			
/ˈsəʊlənɔɪd/			
 coil 线圈			
/kɔɪl/			
 primary coil 原线圈			
/ˈpraɪməri kɔɪl/			
 secondary coil 副线圈			
/ˈsekəndəri kɔɪl/			
 loudspeaker 扬声器			
/ˈləʊdspɪkə/			
 electromagnetic induction 电磁感应			
/ɪˌlektroməɡˈnetɪk ɪnˈdʌkʃn/			
 a.c. generator 交流发电机			
/eɪ ˈsiː ˈdʒenəreɪtə/			

Chemistry

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

 lead 铅			
/liːd/			
 aluminium 铝			
/ˌæljʊˈmɪniəm/			
 magnesium 镁			
/mægˈniːziəm/			
 rusting 生锈			
/ˈrʌstɪŋ/			
 rust 铁锈			
/rʌst/			
 barrier methods 隔离法			
/ˈbæriə ˈmeθədz/			
 galvanising 镀锌			
/ˈgælvaɪnɪzɪŋ/			

 sacrificial protection 牺牲保护			
/ˈsækrɪˈfɪʃl prəˈtektʃn/			
 ore 矿石			
/ɔː/			
 hematite 赤铁矿			
/ˈhemətaɪt/			
 blast furnace 高炉			
/blæst ˈfʊːnɪs/			
 limestone 石灰石			
/ˈlaɪmstəʊn/			
 slag 炉渣			
/slæg/			
 bauxite 铝土矿			
/ˈbəʊksaɪt/			
 cryolite 冰晶石			
/ˈkraɪələɪt/			
 distilled water 蒸馏水			
/dɪˈstɪld ˈwɔːtə/			
 impurities 杂质			
/ɪmˈpjʊərɪtɪz/			
 sewage 污水			
/ˈsuːɪdʒ/			
 microbes 微生物			
/ˈmaɪkraəbz/			
 phosphates 磷酸盐			
/ˈfɒsfets/			
 aquatic life 水生生物			
/əˈkwætɪk laɪf/			
 minerals 矿物质			
/ˈmɪnərəlz/			

Biology

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

 duration 持续时间			
/dʒə'reɪʃn/			
 homeostasis 稳态			
/ˌhəʊmi:ə'sta:sɪz/			
 negative feedback 负反馈			
/ˈnegatɪv ˈfiːdbæk/			
 set point 设定点			
/set poɪnt/			
 diabetes 糖尿病			
/ˌdaɪəˈbiːtiːz/			
 sweat glands 汗腺			
/swet glændz/			
 sweating 出汗			
/ˈswetɪŋ/			
 hair erector muscles 立毛肌			
/heə ɪ'rektə ˈmɜːslz/			
 fatty tissue 脂肪组织			
/ˈfæti ˈtɪʃuː/			
 insulation 隔热			
/ˌɪnsjuːˈleɪʃn/			
 arterioles 小动脉			
/ɑːˈtɪəriəʊlz/			
 vasodilation 血管舒张			
/ˌvæsədiˈleɪʃn/			
 shiver 颤抖			
/ˈʃɪvə/			
 vasoconstriction 血管收缩			
/ˌvæsəˈkɒn'strɪkʃn/			
 tropism 向性			
/ˈtrɒpɪzəm/			

 gravitropism 向地性			
/ˈgrævɪtrɒpɪzəm/			
 gravity 重力			
/ˈgrævɪti/			
 phototropism 向光性			
/ˌfəʊtəʊˈtrɒpɪzəm/			
 auxin 生长素			
/ˈɔːksɪn/			
 shoot 嫩枝			
/ʃuːt/			
 elongate 伸长			
/ˈɛlɒŋgeɪt/			
 drug 药物			
/drʌɡ/			
 chemical reactions 化学反应			
/ˈkɛmɪkl rɪˈækʃnz/			
 antibiotics 抗生素			
/ˌæntɪbaɪˈɒtɪks/			
 infections 感染			
/ɪnˈfɛkʃnz/			
 resistant 耐药			
/rɪˈzɪstənt/			
 asexual reproduction 无性生殖			
/eɪˈseksjuəl rɪprəˈdʌkʃn/			
 parent 亲本			
/ˈpeərənt/			
 offspring 后代			
/ˈɒfsprɪŋ/			
 sexual reproduction 有性生殖			
/ˈseksjuəl rɪprəˈdʌkʃn/			
 fusion 融合			
/ˈfjuːʒn/			

🗨️	nuclei 细胞核			
	/ˈnjuːkli/			
⦿	zygote 合子			
	/ˈzaɪɡəʊt/			
↗	fertilisation 受精			
	/ˈfɜːtɪlaɪˈzeɪʃn/			
↕	variation 变异			
	/ˈveəriˈeɪʃn/			
◯	haploid 单倍体			
	/ˈhæplɔɪd/			
✎	chromosomes 染色体			
	/ˈkrəʊməsaɒmz/			

Mathematics

Topics 4–5 · Geometry, Mensuration

📦	cube 立方体			
	/kjuːb/			
📦	cuboid 长方体			
	/ˈkjuːbɔɪd/			
△	prism 棱柱			
	/ˈprɪzəm/			
📦	cylinder 圆柱			
	/ˈsɪlɪndə/			
△	pyramid 棱锥			
	/ˈpɪrəˌmaɪd/			
△	cone 圆锥			
	/kəʊn/			
◯	sphere 球			
	/sfɪə/			
◯	hemisphere 半球			
	/ˈhemɪsfɪə/			
△	frustum 平截头体			
	/ˈfrʌstəm/			

🗨️	face 面			
	/feɪs/			
—	edge 棱			
	/edʒ/			
📦	surface 表面			
	/ˈsɜːfɪs/			
📏	metric 公制			
	/ˈmetrɪk/			
📦	capacity 容量			
	/kəˈpæsɪti/			
📏	perimeter 周长			
	/pəˈrɪmɪtə/			
↕	height 高			
	/haɪt/			

Computer Science

Topic 7

📏	design 设计			
	/dɪˈzaɪn/			
<>	coding 编码			
	/ˈkəʊdɪŋ/			
🔧	testing 测试			
	/ˈtestɪŋ/			
📦	abstraction 抽象			
	/əbˈstrækʃn/			
↗	decomposition 分解			
	/ˌdiːkɒmpəˈzɪʃn/			
🔗	sub-systems 子系统			
	/sʌb ˈsɪstəmz/			
📏	structure diagram 结构图			
	/ˈstrʌktʃəˈdaɪəɡræm/			
↺	iterative testing 迭代测试			
	/ɪˈtərətɪv ˈtestɪŋ/			

 test data 测试数据			
/test 'deɪtə/			
 flowchart 流程图			
/ˈfləʊtʃɑ:t/			
 pseudocode 伪代码			
/ˈsu:dəʊkəʊd/			
 algorithm 算法			
/ˈælgərɪθəm/			
 input 输入			
/ˈɪnpʊt/			
 processing 处理			
/ˈprəʊsesɪŋ/			
 output 输出			
/ˈaʊtpʊt/			
 validation 验证			
/ˌvælɪˈdeɪʃn/			
 range check 范围检查			
/reɪndʒ tʃek/			
 length check 长度检查			
/leŋθ tʃek/			
 type check 类型检查			
/taɪp tʃek/			
 presence check 存在性检查			
/ˈprezəns tʃek/			

Economics

Topic 4 · Government and the macroeconomy

 Supply-side policy 供给侧政策			
/səˈplaɪ saɪd ˈpəlɪsi/			
 privatisation 私有化			
/ˌpraɪvataɪˈzeɪʃn/			

 deregulation 放松管制			
/dɪˌregjəʊˈleɪʃn/			
 incentives 激励			
/ɪnˈsentɪvz/			
 gross domestic product 国内生产总值			
/grəʊs dəˈmestɪk ˈprɒdækt/			
 Real 实际			
/rɪəl/			
 business cycle 经济周期			
/ˈbɪznəs ˈsaɪkl/			
 boom 繁荣			
/bu:m/			
 recession 衰退			
/rɪˈseɪʃn/			
 slump 萧条			
/slʌmp/			
 recovery 复苏			
/rɪˈkʌvəri/			
 living standards 生活水平			
/ˈlɪvɪŋ ˈstændədz/			
 claimant count 失业救济 申领人数			
/ˈkleɪmənt kaʊnt/			
 unemployment benefit 失业救济金			
/ʌnemˈplɔɪmənt ˈbenɪfɪt/			

English

Topic 9 · Listening skills

 recording 录音			
/rɪˈkɔ:dɪŋ/			
 specific 具体的			
/spəˈsɪfɪk/			

📍 **directions** 方向

/daɪˈrekʃnz/

💖 **feelings** 感受

/ˈfiːlɪŋz/

🔗 **connect** 连接

/kəˈnekt/

📌 **suggests** 暗示

/səˈdʒests/
