

Morning Reading 晨读

Grade 10 · Week 15

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。

Is a country rich if it has money? Not only that. The **Human Development Index** measures three things together: income per person, education, and **life expectancy**, how long people live. A country can grow richer while some people stay poor. **Absolute poverty** means a family cannot afford basic food and shelter. **Relative poverty** means they have far less than others around them. One tool against low pay is a **minimum wage**.

In physics, you learned that some rocks and even the air are slightly **radioactive**. A detector clicks even with no sample nearby; this is **background radiation**, coming from space and from the ground. Radioactive **decay** is **random**: no one can say which atom will break next, only how many will decay on average.

How does a computer find one name in a list of millions? A **linear search** checks each item, one by one. To put a list in order, a **bubble sort** swaps neighbours again and again until the list is sorted.

Talk about it 说一说:

- 1. Which matters more for a good life: income, education, or health? Discuss.
- 2. How would you find one card in a shuffled deck? Compare your method with a linear search.

Physics

Topics 1-5 · Motion, forces and energy, Nuclear physics

☒ nuclide 核素			
/ˈnjuːklaɪd/			
☞ isotope 同位素			
/ˈaɪsəˌtəʊp/			
☞ nuclear fission 核裂变			
/ˈnjuːklɪə ˈfɪʃn/			
↗ nuclear fusion 核聚变			
/ˈnjuːklɪə ˈfjuːʒn/			
☒ hydrogen 氢			
/ˈhaɪdrədʒn/			
☒ helium 氦			
/ˈhiːliəm/			
⚠ unstable 不稳定			
/ʌnˈsteɪbl/			
☞ radiation 辐射			
/ˈreɪdɪˈeɪʃn/			
☞ background radiation 背景辐射			
/ˈbækgraʊnd ˈreɪdɪˈeɪʃn/			
☞ gamma radiation γ 射线			
/ˈɡæmə ˈreɪdɪˈeɪʃn/			
☞ radioactive 放射性			
/ˈreɪdɪəʊˈæktɪv/			
↘ decay 衰变			
/dɪˈkeɪ/			
☞ spontaneous 自发			
/spɒnˈteɪniəs/			
☞ random 随机			
/ˈrændəm/			
☒ radon 氡			
/ˈreɪdɒn/			

 cosmic rays 宇宙射线			
/ˈkɒzmɪk reɪz/			
 detector 探测器			
/dɪˈtektə/			
 counter 计数器			
/ˈkaʊntə/			
 count rate 计数率			
/kaʊnt reɪt/			
 corrected 修正			
/kəˈrektɪd/			
 ionising 电离			
/ˈaɪənaɪzɪŋ/			
 aluminium 铝			
/ˌæljʊˈmɪniəm/			

Chemistry

Topics 10-11 · Chemistry of the environment, Organic chemistry

 photosynthesis 光合作用			
/ˌfəʊtəʊˈsɪnθəsis/			
 yeast 酵母			
/jiːst/			
 glucose 葡萄糖			
/ˈgluːkəʊs/			
 displayed formula 结构式			
/dɪˈspleɪd ˈfɔːmjələ/			
 structural formula 结构简式			
/ˈstrʌktʃərəl ˈfɔːmjələ/			
 general formula 通式			
/ˈdʒenərəl ˈfɔːmjələ/			
 Structural isomers 同分异构体			
/ˈstrʌktʃərəl ˈaɪsəməz/			

 homologous series 同系物			
/həˈmɒləɡəs ˈsɪəriːz/			
 functional group 官能团			
/ˈfʌŋkʃənəl grʊːp/			
 saturated 饱和			
/ˈsætʃəreɪtɪd/			
 unsaturated 不饱和			
/ʌnˈsætʃəreɪtɪd/			
 coal 煤			
/kəʊl/			
 natural gas 天然气			
/ˈnætʃərəl ɡæs/			
 petroleum 石油			
/pəˈtrɔːli.əm/			
 hydrocarbon 碳氢化合物			
/ˈhaɪdrəkaːbən/			
 fractions 馏分			
/ˈfrækʃnz/			
 fractional distillation 分馏			
/ˈfrækʃənəl dɪstɪˈleɪʃn/			
 fractionating column 分馏塔			
/ˈfrækʃənətɪŋ ˈkɒləm/			
 chain length 链长			
/tʃeɪn leŋθ/			
 volatility 挥发性			
/ˌvɒləˈtɪlɪti/			
 viscosity 黏度			
/ˈvɪʒkəsɪti/			

Biology

Topics 16-17 · Reproduction, Inheritance

♂ secondary sexual characteristics 第二性征			
<i>/ˈsekəndəri ˈseksjuəl ˌkærɪktəˈrɪstɪks/</i>			
↻ menstrual cycle 月经周期			
<i>/ˈmenstruəl ˈsaɪkl/</i>			
○ ovulation 排卵			
<i>/ˌʌvjuˈleɪʃn/</i>			
👶 progesterone 孕酮			
<i>/ˈprəʊˈdʒestərən/</i>			
🤰 pregnancy 怀孕			
<i>/ˈpregnənsi/</i>			
🦠 sexually transmitted infection 性传播感染			
<i>/ˈseksju:əli træɪnˈsmɪtɪd mˈfekʃn/</i>			
🦠 infection 感染			
<i>/ɪnˈfekʃn/</i>			
🦠 virus 病毒			
<i>/ˈvaɪrəs/</i>			
📊 codes 编码			
<i>/kəʊdɪz/</i>			
🧬 allele 等位基因			
<i>/əˈli:l/</i>			
♂ sex chromosomes 性染色体			
<i>/seks ˈkrəʊməsaʊmz/</i>			
÷ ratio 比例			
<i>/ˈreɪʃiəʊ/</i>			
🧠 neurotransmitters 神经递质			
<i>/ˈnju:trənsɪmɪtəz/</i>			
🗣️ expresses 表达			
<i>/ekˈspresɪz/</i>			

✉ messenger 信使			
<i>/ˈmesɪndʒə/</i>			
⦿ ribosome 核糖体			
<i>/ˈrɪːbəʊsaʊm/</i>			
📦 mitosis 有丝分裂			
<i>/maɪˈtəʊsɪs/</i>			
📦 replication 复制			
<i>/ˌreplɪˈkeɪʃn/</i>			
⦿ daughter cell 子细胞			
<i>/ˈdɔ:tə sel/</i>			
🧬 stem cells 干细胞			
<i>/stem selz/</i>			
↗ meiosis 减数分裂			
<i>/meɪˈəʊsɪs/</i>			
📦 inheritance 遗传			
<i>/ɪnˈherɪtəns/</i>			
🧬 genotype 基因型			
<i>/ˈdʒenətaɪp/</i>			
👁 phenotype 表现型			
<i>/ˈfenətaɪp/</i>			
↑ dominant 显性			
<i>/ˈdomɪnənt/</i>			
↓ recessive 隐性			
<i>/rɪˈsesɪv/</i>			
= homozygous 纯合子			
<i>/ˈhɒməˈzɪɡəs/</i>			
💎 pure-breeding 纯种			
<i>/ˈpjʊə ˈbrɪdɪŋ/</i>			
± heterozygous 杂合子			
<i>/ˈhetrəˈzɪɡəs/</i>			
✕ cross 杂交			
<i>/kros/</i>			
📊 Punnett square 庞纳特方格			
<i>/ˈpʌnɪt skweə/</i>			

 pedigree diagram 系谱图			
/ˈpedɪɡriː ˈdaɪəɡræm/			
 test cross 测交			
/test kros/			
 codominance 共显性			
/'kəʊdɒmɪnəns/			
 blood groups 血型			
/blʌd ɡruːps/			
 sex-linked 伴性遗传			
/seks lɪŋkt/			

Mathematics

Topics 6–7 · Trigonometry, Transformations and vectors

 angle of depression 俯角			
/ˈæŋɡl əv dɪˈpreʃn/			
 trigonometric equation 三角方程			
/ˌtrɪɡənəʊˈmetrɪk ɪˈkwweɪʃn/			
 sine rule 正弦定理			
/saɪn ruːl/			
 cosine rule 余弦定理			
/'kəʊsaɪn ruːl/			
 ambiguous case 两解情况			
/æmˈbɪɡjuːəs keɪs/			
 plane 平面			
/pleɪn/			
 transformation 变换			
/trænsfəˈmeɪʃn/			
 reflection 反射			
/rɪˈflekʃn/			
 mirror line 对称轴			
/'mɪrə laɪn/			
 rotation 旋转			
/rəʊˈteɪʃn/			

 enlargement 放大			
/enˈlɑːdʒmənt/			
 translation 平移			
/trænsˈleɪʃn/			
 vector 向量			
/'vektə/			
 column vector 列向量			
/'kɒləm ˈvektə/			
 scalar 标量			
/'skeɪlə/			
 directed line segment 有向线段			
/daɪˈrektɪd laɪn ˈseɡmənt/			

Computer Science

Topic 8 · Programming

 integer 整数			
/'ɪntɪdʒə/			
 real 实数			
/rɪəl/			
 char 字符			
/'tʃɑː/			
 string 字符串			
/'strɪŋ/			
 Boolean 布尔值			
/'bʊːliən/			
 sequence 顺序			
/'siːkwəns/			
 selection 选择			
/'siːlekʃn/			
 iteration 迭代			
/'ɪtəˈreɪʃn/			
 loop 循环			
/'luːp/			

 count-controlled loop 计数循环			
<i>/kaʊnt kən'trəʊld lu:p/</i>			
 pre-condition loop 前测循环			
<i>/pri: kən'diʃn lu:p/</i>			
 post-condition loop 后测循环			
<i>/pəʊst kən'diʃn lu:p/</i>			
% remainder 余数			
<i>/rɪ'meɪndə/</i>			
 nested statement 嵌套语句			
<i>/ˈnestɪd ˈsteɪtmənt/</i>			
 substring 子串			
<i>/ˈsʌbstɪŋ/</i>			
 upper case 大写			
<i>/ˈʌpə keɪs/</i>			
 lower case 小写			
<i>/ˈləʊə keɪs/</i>			
 length 长度			
<i>/leŋθ/</i>			
 procedure 过程			
<i>/prəˈsi:dʒə/</i>			
 function 函数			
<i>/ˈfʌŋkʃn/</i>			

Economics

Topic 5 · Economic development

 life expectancy 预期寿命			
<i>/laɪf ɛkˈspektənsɪ/</i>			
 income distribution 收入分配			
<i>/ˈɪŋkəm ˌdɪstrɪˈbjʊ:ʃn/</i>			

 poverty 贫困			
<i>/ˈpɒvəti/</i>			
 absolute poverty 绝对贫困			
<i>/ˈæbsəlu:t ˈpɒvəti/</i>			
 relative poverty 相对贫困			
<i>/ˈrelatɪv ˈpɒvəti/</i>			
 redistribute 再分配			
<i>/ˌrɪːˈdɪstrɪbjʊ:t/</i>			
 minimum wage 最低工资			
<i>/ˈmɪnɪmə wɛɪdʒ/</i>			
 benefits 福利			
<i>/ˈbenɪfɪts/</i>			
 birth rate 出生率			
<i>/bɜ:θ reɪt/</i>			
 death rate 死亡率			
<i>/deθ reɪt/</i>			
 migration 移民			
<i>/maɪˈɡreɪʃn/</i>			
 immigration 迁入			
<i>/ˌɪmɪˈɡreɪʃn/</i>			
 emigration 迁出			
<i>/emɪˈɡreɪʃn/</i>			
 net migration 净移民			
<i>/net maɪˈɡreɪʃn/</i>			

English

Topics 10-11 · Speaking skills, Vocabulary and text types

 intonation 语调			
<i>/ˌɪntəˈneɪʃn/</i>			
 paraphrasing 释义			
<i>/ˈpærəfreɪzɪŋ/</i>			
 collocations 词语搭配			
<i>/ˌkɒləʊˈkeɪʃnz/</i>			

☞ **set phrases** 固定短语

/set 'freɪzɪz/

☞ **phrasal verbs** 短语动词

/'freɪzɪ vɜːbz/

≡ **fluent** 流利

/'fluːənt/
