
Morning Reading

Grade 10 · Week 15

Read each word aloud, then copy the English word three times.

Reading

Read the passage aloud twice.

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 :

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**

/ˈnjuːklaɪd/

🔗 **isotope**

/ˈaɪsətəʊp/

🔗 **nuclear fission**

/ˈnjuːklɪə ˈfɪʃn/

⤴ **nuclear fusion**

/ˈnjuːklɪə ˈfjuːʒn/

☒ **hydrogen**

/ˈhaɪdrədʒn/

☒ **helium**

/ˈhiːliəm/

⚠ **unstable**

/ʌnˈsteɪbl/

🔗 **radiation**

/ˌreɪdɪˈeɪʃn/

🔗 **background radiation**

/ˈbækgraʊnd ˌreɪdɪˈeɪʃn/

🔗 **gamma radiation γ**

/ˈgæmə ˌreɪdɪˈeɪʃn/

🔗 **radioactive**

/ˌreɪdɪəʊˈæktɪv/

🔗 **decay**

/dɪˈkeɪ/

✳ **spontaneous**

/spɒnˈteɪniəs/

🔗 **random**

/ˈrændəm/

☒ **radon**

/ˈreɪdɒn/

 cosmic rays /'kɒzmɪk reɪz/			
 detector /dɪ'tektə/			
 counter /'kaʊntə/			
 count rate /kaʊnt reɪt/			
 corrected /kə'rektɪd/			
 ionising /'aɪənaɪzɪŋ/			
 aluminium /ˌæljʊ'mɪniəm/			

Chemistry

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

 photosynthesis /ˌfəʊtəʊ'sɪnθəʊsɪs/			
 yeast /ji:st/			
 glucose /'glu:kəʊs/			
 displayed formula /dɪ'spleɪd 'fɔ:mjələ/			
 structural formula /'strʌktʃərəl 'fɔ:mjələ/			
 general formula /'dʒenərəl 'fɔ:mjələ/			
 Structural isomers /'strʌktʃərəl 'aɪsəməz/			
 homologous series /hə'mɒləgəs 'sɪəri:z/			

 functional group /'fʌŋkʃənl gru:p/			
 saturated /'sætʃəreɪtɪd/			
 unsaturated /ʌn'sætʃəreɪtɪd/			
 coal /kəʊl/			
 natural gas /'nætʃərəl gæs/			
 petroleum /pə'trəʊli:əm/			
 hydrocarbon /'haɪdrəka:bən/			
 fractions /'frækʃnz/			
 fractional distillation /'frækʃənl dɪstɪ'leɪʃn/			
 fractionating column /'frækʃənətɪŋ 'kɒləm/			
 chain length /tʃeɪn leŋθ/			
 volatility /ˌvɒlə'tɪlɪti/			
 viscosity /vɪ'skɒsɪti/			

Biology

Topics 16–17 · Reproduction, Inheritance

 secondary sexual characteristics /'sekəndəri 'sekʃu:əl ˌkærɪktə'rɪstɪks/			
 menstrual cycle /'menstru:əl 'saɪkl/			

	ovulation /ˌʊvjʊˈleɪʃn/			
	progesterone /prəʊˈdʒestərən/			
	pregnancy /ˈpregnənsi/			
	sexually transmitted infection /ˈseksʃu:əli trænˈsmitɪd ɪnˈfekʃn/			
	codes /kəʊdɪz/			
	allele /əˈli:l/			
	sex chromosomes /seks ˈkrəʊməsəʊmz/			
	ratio /ˈreɪʃiəʊ/			
	expresses /ekˈspresɪz/			
	messenger /ˈmesɪndʒə/			
	mitosis /maɪˈtəʊsɪs/			
	replication /ˌreplɪˈkeɪʃn/			
	daughter cell /ˈdɔ:tə sel/			
	stem cells /stem selz/			
	meiosis /meɪˈəʊsɪs/			
	inheritance /ɪnˈherɪtəns/			
	genotype /ˈdʒenətaɪp/			

👁	phenotype /'fenətaɪp/			
↑	dominant /'domɪnənt/			
↓	recessive /rɪ'sesɪv/			
=	homozygous /ˌhɒmə'zɪɡəs/			
💎	pure-breeding /pjʊə 'brɪːdɪŋ/			
±	heterozygous /ˌhetrə'zɪɡəs/			
×	cross /krɒs/			
⊞	Punnett square /'pʌnɪt skweə/			
👤	pedigree diagram /'pedɪɡriː 'daɪəɡræm/			
×	test cross /test krɒs/			
↔	codominance /'kəʊdəmɪnəns/			
🩸	blood groups /blʌd ɡruːps/			
♂	sex-linked /seks lɪŋkt/			

Mathematics

Topics 6–7 · Trigonometry, Transformations and vectors

↘	angle of depression /'æŋɡl ɒv dɪ'preʃn/			
∧	trigonometric equation /ˌtrɪɡənəʊ'metɪk i'kweɪʃn/			

 sine rule <i>/saɪn ru:l/</i>			
 cosine rule <i>/'kəʊsaɪn ru:l/</i>			
 ambiguous case <i>/æm'bigju:əs keɪs/</i>			
 plane <i>/pleɪn/</i>			
 transformation <i>/trænsfɔ:'meɪʃn/</i>			
 reflection <i>/rɪ'flekʃn/</i>			
 mirror line <i>/'mɪrə laɪn/</i>			
 rotation <i>/rəʊ'teɪʃn/</i>			
 enlargement <i>/en'la:dʒmənt/</i>			
 translation <i>/træn'sleɪʃn/</i>			
 vector <i>/'vektə/</i>			
 column vector <i>/'kɒləm 'vektə/</i>			
 scalar <i>/'skeɪlə/</i>			
 directed line segment <i>/daɪ'rektdɪd laɪn 'segmənt/</i>			

Computer Science

Topic 8 · Programming

± integer

/ˈɪntɪdʒə/

⊙ real

/rɪəl/

T char

/tʃɑː/

∞ string

/strɪŋ/

⊙ Boolean

/ˈbuːliən/

≡ sequence

/ˈsiːkwəns/

∞ selection

/sɪˈlekʃn/

↺ iteration

/ˌɪtəˈreɪʃn/

↺ loop

/luːp/

↺ count-controlled loop

/kaʊnt kənˈtrəʊld luːp/

↑ pre-condition loop

/priː kənˈdɪʃn luːp/

↓ post-condition loop

/pəʊst kənˈdɪʃn luːp/

% remainder

/rɪˈmeɪndə/

≻ nested statement

/ˈnestɪd ˈsteɪtmənt/

✂ substring

/ˈsʌbstrɪŋ/

↑ upper case /'ʌpə keɪs/			
↓ lower case /'ləʊə keɪs/			
↔ length /leŋθ/			
 procedure /prə'si:dʒə/			
 function /'fʌŋkʃn/			

Economics

Topic 5 · Economic development

♥ life expectancy /laɪf ek'spektənsi/			
↗ income distribution /'ɪŋkʌm ,dɪstrɪ'bju:ʃn/			
☹ poverty /'pɒvəti/			
☹ absolute poverty /'æbsəlu:t 'pɒvəti/			
⚖ relative poverty /'relatɪv 'pɒvəti/			
↗ redistribute /,'ri:'dɪstrɪbju:t/			
⬆ minimum wage /'mɪnɪmə wɛɪdʒ/			
👤 benefits /'benɪfɪts/			
😊 birth rate /bɜ:θ reɪt/			
💀 death rate /deθ reɪt/			

 migration /maɪ'greɪʃn/	_____	_____	_____
 immigration /ɪmɪ'greɪʃn/	_____	_____	_____
 emigration /emi'greɪʃn/	_____	_____	_____
 net migration /net maɪ'greɪʃn/	_____	_____	_____

English

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

 intonation /ɪntə'neɪʃn/	_____	_____	_____
 paraphrasing /ˈpærəfreɪzɪŋ/	_____	_____	_____
 collocations /ˌkɒləʊ'keɪʃnz/	_____	_____	_____
 set phrases /set 'freɪzɪz/	_____	_____	_____
 phrasal verbs /'freɪzl vɜːbz/	_____	_____	_____
 fluent /'fluːənt/	_____	_____	_____