
Morning Reading

Grade 10 · Week 16

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

Reading

Read the passage aloud twice.

Why is January cold and July hot? The Earth's **axis** is **tilted**. As the Earth travels around the **Sun**, our half of the planet sometimes leans towards the Sun and sometimes away. That gives us the **seasons**. The Earth also **rotates** once every 24 hours, which gives us day and night.

Programs repeat things too. A **loop** runs the same lines again and again. A **count-controlled loop** repeats an exact number of times: print a star, five times. **Selection** means the program chooses a path: IF it rains, THEN take an umbrella. With **sequence**, selection and **iteration**, you can build any program.

Countries also repeat a yearly cycle: they buy and sell with each other. Goods sold to other countries are **exports**; goods bought from them are **imports**. **Developed countries** often sell services and machines, while many **developing countries** sell food and raw materials, though this is changing fast.

Talk about it :

1. Explain to a child why summer days are long and winter days are short.
2. Name three things your family owns that were imported. Where were they made?

Physics

Topics 5–6 · Nuclear physics, Space physics

electromagnetic wave

/ɪˌlektərəmæg'netɪk weɪv/

lead

/liːd/

→ penetrating

/'penɪtreɪtɪŋ/

sample

/'sæmpl/

half-life

/hɑːf laɪf/

smoke alarm

/sməʊk ə'laɪm/

sterilise

/'sterəlaɪz/

cancer

/'kænsə/

living cells

/'lɪvɪŋ selz/

bacteria

/bæk'tɪəriə/

mutation

/mjuː'teɪʃn/

dose

/dəʊs/

exposure

/ek'spəʊʒə/

shielding

/'ʃiːldɪŋ/

rotate

/rəʊ'teɪt/

+ axis /ˈæksɪs/			
◁ tilted /ˈtɪltɪd/			
☀ Sun /sʌn/			
☀ seasons /ˈsiːznz/			
☾ Moon /muːn/			
☾ phases /ˈfeɪzɪz/			
◯ circumference /sɜːˈkʌmfərəns/			

Chemistry

Topic 11 · Organic chemistry

◯ bitumen /ˈbɪtʃuːmən/			
◻ Alkanes /ˈælkəɪnz/			
☒ substitution reaction /ˌsʌbstɪˈtjuːʃn rɪˈækʃn/			
☀ photochemical reaction /ˌfəʊtəʊˈkemɪkl rɪˈækʃn/			
☀ ultraviolet light /ˌʊltrəˈvaɪələɪt laɪt/			
◻ Alkenes /ˈælkɪːnz/			
↗ Cracking /ˈkrækɪŋ/			
+ addition reactions /əˈdɪʃn rɪˈækʃnz/			

 addition polymerisation

/ə'dɪʃn ˌpɒlɪməraɪ'zeɪʃn/

 condensation polymerisation

/kɒndən'seɪʃn ˌpɒlɪməraɪ'zeɪʃn/

 Alcohols

/'ælkəhɒlz/

 ethanol

/'eθənl/

 fermentation

/fɜːmənt'eɪʃn/

 ethene

/'iːθiːn/

 solvent

/'sɒlvənt/

 Carboxylic acids

/ˌkɑːbək'sɪlɪk 'æsɪdz/

 amino acid

/ə'miːnəʊ 'æsɪd/

 vinegar

/'vɪnɪgə/

 ester

/'estə/

 polymer

/'pɒlɪmə/

Biology

Topics 17–19 · Inheritance, Variation and selection, Organisms and their environment

 colour blindness

/'kʌlə 'blaɪndnəs/

 continuous variation

/kən'tɪnjuːəs ˌveəri'eɪʃn/

 discontinuous variation

/dɪskən'tɪnjuːəs ˌveəri'eɪʃn/

	ABO blood groups <i>/ˌeɪ biː ˈəʊ bləd gruːps/</i>			
	mutation <i>/mjuːˈteɪʃn/</i>			
	gene mutation <i>/dʒiːn mjuːˈteɪʃn/</i>			
	ionising radiation <i>/ˈaɪənəɪzɪŋ ˌreɪdɪˈeɪʃn/</i>			
	adaptive feature <i>/əˈdæptɪv ˈfi:tʃə/</i>			
	inherited <i>/ɪnˈherɪtɪd/</i>			
	survive <i>/səˈvaɪv/</i>			
	reproduce <i>/rɪprəˈdjuːs/</i>			
	hydrophytes <i>/ˈhaɪdrəˈfaɪts/</i>			
	xerophytes <i>/ˈzɪərəˈfaɪts/</i>			
	natural selection <i>/ˈnætʃərəl sɪˈleɪʃn/</i>			
	many offspring <i>/ˈmeni ˈɒfsprɪŋ/</i>			
	competition <i>/ˌkɒmpəˈtɪʃn/</i>			
	resources <i>/rɪˈzɔːsɪz/</i>			
	selective breeding <i>/sɪˈlektɪv ˈbriːdɪŋ/</i>			
	artificial selection <i>/ˌɑːtɪˈfɪʃl sɪˈleɪʃn/</i>			
	crops <i>/krɒps/</i>			

 **food chain**
/fu:d tʃeɪn/

 **food web**
/fu:d web/

 **producer**
/prə'dju:sə/

 **consumer**
/kən'su:mə/

 **herbivore**
/'hɜ:bɪvɔ:/

 **carnivore**
/'kɑ:nɪvɔ:/

 **decomposer**
/ˌdi:kəm'pəʊzə/

 **decomposition**
/ˌdi:kəm'pəʊzɪʃn/

 **trophic level**
/'trəʊfɪk 'levl/

 **pyramid**
/'pɪrəˌmɪd/

 **biomass**
/ˌbaɪəʊ'mæs/

 **crop plants**
/krɒp plænts/

 **overharvesting**
/ˌəʊvə'hɑ:vɪstɪŋ/

Mathematics

Topics 7–8 · Transformations and vectors, Probability

 **position vector**
/pə'zɪʃn 'vektə/

 **collinear**
/'kɒlɪniə/

 coplanar <i>/ˌkəʊˈpleɪnə/</i>			
 probability <i>/ˌprɒbəˈbɪlɪti/</i>			
 event <i>/ɪˈvent/</i>			
 outcome <i>/ˈaʊtkʌm/</i>			
% relative frequency <i>/ˈrelatɪv ˈfri:kwənsi/</i>			
 fair <i>/feə/</i>			
 bias <i>/ˈbaɪəs/</i>			
 random <i>/ˈrændəm/</i>			
 expected frequency <i>/ekˈspektɪd ˈfri:kwənsi/</i>			
 combined events <i>/kəmˈbaɪnd ɪˈvents/</i>			
 independent events <i>/ˌɪndɪˈpendənt ɪˈvents/</i>			
 mutually exclusive <i>/ˈmju:tʃu:əli ɛksˈklu:sɪv/</i>			
 sample space diagram <i>/ˈsæmpl speɪs ˈdaɪəgræm/</i>			
 tree diagram <i>/tri: ˈdaɪəgræm/</i>			

Computer Science

Topics 8–9 · Programming, Databases

() parameter

/pə'remɪtə/

□ local variable

/'ləʊkl 'veəriəbl/

⊕ global variable

/'gləʊbl 'veəriəbl/

||\ library routine

/'laɪbrəri ru:'ti:n/

🔑 maintainable

/meɪn'teɪnəbl/

🏷 meaningful identifiers

/'mi:nɪŋfl aɪ'dentɪfaɪəz/

💬 comments

/'kɒments/

[] array

/ə'reɪ/

index

/'ɪndeks/

**≡ one-dimensional (1D)
array**

/wʌn daɪ'menʃənəl ə'reɪ/

**▦ two-dimensional (2D)
array**

/tu: daɪ'menʃənəl ə'reɪ/

📄 file

/faɪl/

🗄 database

/'deɪtəbeɪs/

🗄 single-table database

/'sɪŋɡl 'teɪbl 'deɪtəbeɪs/

📋 record

/'rekɔ:d/

 field /fi:ld/			
T text/alphanumeric /tekst ,ælfənju: 'merɪk/			
T character /'kærɪktə/			
 date/time /dert taɪm/			
 primary key /'praɪməri ki:/			

Economics

Topics 5–6 · Economic development, International trade and globalisation

 population structure /,pɒpjʊ 'leɪfn 'strʌktʃə/			
 population pyramid /,pɒpjʊ 'leɪfn 'pɪrəməɪd/			
 ageing population /'eɪdʒɪŋ ,pɒpjʊ 'leɪfn/			
 economic development /,i:kə 'nɒmɪk dɪ'veləpmənt/			
 developed countries /dɪ'veləpt 'kʌntrɪz/			
 developing countries /dɪ'veləpɪŋ 'kʌntrɪz/			
 subsistence farming /sʌb'sɪstəns 'fɑ:mɪŋ/			
 debt /det/			
 trade /treɪd/			
 exports /'ekspɔ:ts/			

 **imports**
/ɪm'pɔ:ts/

 **free trade**
/fri: treɪd/

 **domestic**
/də'mestɪk/

 **compete**
/kəm'pi:t/

English

Topics 5–11 · Writing a report, Vocabulary and text types

 **text type**
/tekst taɪp/

 **notice**
/'nəʊtɪs/

 **leaflet**
/'li:flɪt/

 **act**
/ækt/

 **aim**
/eɪm/
