
Morning Reading

Grade 10 · Week 3

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

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Reading

Read the passage aloud twice.

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When you send a photo to a friend, your phone does something clever. It cuts the photo into small **packets**. Each packet gets a **packet header** with the **address** of your friend's phone. **Routers** on the internet read the address and push each packet forward. This is called **packet switching**. At the other end, the packets join together again, and your friend sees the photo.

In science class this week, we learned about balance. A seesaw turns around a **pivot**. The turning effect of a force is called a **moment**. When the moments on both sides are equal, the seesaw is in **equilibrium**. Every object also has a **centre of gravity**, the point where its weight seems to act.

In economics, a country must choose what to make. A **production possibility curve** shows the choices. Making more phones may mean making less food. That is a **trade-off**.

Talk about it :

1. Explain to a younger student how a photo travels across the internet.
2. Give one trade-off you made this week. What did you give up?

Physics

Topics 3–5 · Waves, Electricity and magnetism, Nuclear physics

 **enlarged**

/enˈlɑːdʒd/

 **diminished**

/dɪˈmɪnɪʃt/

 **upright**

/ˈʌpraɪt/

 **inverted**

/ɪnˈvɜːtɪd/

 **short-sightedness**

/ʃɔːt ˈsaɪtɪdnəs/

 **retina**

/ˈretɪnə/

 **long-sightedness**

/lɒŋ ˈsaɪtɪdnəs/

 **artificial satellites**

/ˌɑːtɪˈfɪʃl ˈsætəlaɪts/

 **low orbit**

/ləʊ ˈɔːbɪt/

 **geostationary orbit**

/ˌdʒiːəʊˈsteɪʃənəri ˈɔːbɪt/

 **analogue**

/ˈænəlɒɡ/

 **digital**

/ˈdɪdʒɪtl/

 **loudness**

/ˈlaʊdnəs/

 **pitch**

/pɪtʃ/

 **Ultrasound**

/ˌʊltrəˈsaʊnd/

↕ **repulsion**

/rɪ'pʌlʃn/

🌀 **attraction**

/ə'trækʃn/

≡ **ranges**

/'reɪndʒɪz/

👉 **Fleming's right-hand rule**

/'flemɪŋz raɪt hænd ru:l/

☞ **Fleming's left-hand rule**

/'flemɪŋz left hænd ru:l/

↪ **deflected**

/dɪ'flektɪd/

👂 **absorbed**

/əb'sɔ:bd/

📌 **medical tracer**

/'medɪkl 'treɪsə/

Chemistry

Topics 2–7 · Atoms, elements and compounds, Acids, bases and salts

🏠 **giant covalent structure**

/'dʒaɪənt 'kəʊvələnt 'strʌktʃə/

🌀 **mixture**

/'mɪkstʃə/

👁 **electrons**

/'ɪlektrɒnz/

⊗ **element**

/'elɪmənt/

⊕ **proton**

/'prəʊtɒn/

🎯 **nucleus**

/'nju:klɪəs/

 charge <i>/tʃɑːdʒ/</i>			
# proton number <i>/'prəʊtɒn 'nʌmbə/</i>			
Σ nucleon number <i>/'njuːklɪən 'nʌmbə/</i>			
 delocalised electrons <i>/dɪ'lɒkəlaɪzd ɪ'lektɒnz/</i>			
 shells <i>/ʃelz/</i>			
 neutrons <i>/'njuːtrɒnz/</i>			
ᶿ atomic number <i>/ə'tɒmɪk 'nʌmbə/</i>			
 mass number <i>/mæs 'nʌmbə/</i>			
 relative atomic mass <i>/'relatɪv ə'tɒmɪk mæs/</i>			
 electronic configuration <i>/ɪlek'trɒnɪk kən'fɪgʒə'reɪʃn/</i>			
 Periodic Table <i>/ˌpɪərɪ'ɒdɪk 'teɪbl/</i>			
 Period <i>/'pɪəriəd/</i>			
 Group <i>/gruːp/</i>			

Biology

Topics 1–2 · Characteristics and classification of living organisms, Organisation of the organism

 **viruses**

/ˈvaɪrəsɪz/

 **protein coat**

/ˈprəʊtiːn kəʊt/

 **genetic material**

/dʒiˈnetɪk məˈtɪəriəl/

 **host**

/həʊst/

 **digestion**

/daɪˈdʒestʃn/

 **division**

/dɪˈvɪʒn/

 **cell membrane**

/sel ˈmembreɪn/

 **cytoplasm**

/ˈsaɪtəplæzəm/

 **ribosomes**

/ˈrɪbə səʊmz/

 **mitochondria**

/ˌmaɪtəˈkɒndrɪə/

 **vacuole**

/ˈvækjuːəl/

 **proteins**

/ˈprəʊtiːnz/

 **cellulose**

/ˈseljuːləʊs/

 **chlorophyll**

/ˌklɒrəʊˈfɪl/

 **cell sap**

/sel sæp/

 **plasmids**

/ˈplæzmidz/

 **specialised cells**

/ˈspeʃəlaɪzd selz/

 **ciliated cells**

/ˈsɪliətɪd selz/

 **mucus**

/ˈmjuːkəs/

 **trachea**

/trəˈkiə/

 **bronchi**

/ˈbrɒŋkai/

 **root hair cells**

/ruːt heə selz/

 **absorption**

/əbˈsɔːpʃn/

 **palisade mesophyll cells**

/ˈpælɪseɪd ˈmesəfil selz/

 **neurones**

/ˈnjuːrəʊnz/

 **electrical impulses**

/ɪˈlektrɪkl ˈɪmpʌlsɪz/

 **red blood cells**

/red bləd selz/

 **oxygen**

/ˈɒksɪdʒn/

 **sperm**

/spɜːm/

 **egg cells**

/eg selz/

 **gametes**

/ˈgæmiːts/

 **tissue**
/'tʃuː/

 **muscle**
/'mʌsl/

 **organ**
/'ɔːɡən/

 **organ system**
/'ɔːɡən 'sɪstəm/

Mathematics

Topic 1 · Number

 **rationalise the denominator**
/'ræʃənəlaɪz ðə di'nɒmɪneɪtə/

 **denominator**
/di'nɒmɪneɪtə/

 **numerator**
/'njuːməreɪtə/

 **proper fraction**
/'prɒpə 'frækʃn/

 **improper fraction**
/ɪm'prɒpə 'frækʃn/

 **mixed number**
/mɪkst 'nʌmbə/

 **decimal**
/'desɪml/

 **percentage**
/pə'sentɪdʒ/

 **simplest form**
/'sɪmpəlɪst fɔːm/

 **recurring decimal**
/rɪ'kɜːrɪŋ 'desɪml/

order of operations

/ˈɔːdə ɒv ˌɒpəˈreɪʃnz/

magnitude

/ˈmæɡnɪtjuːd/

× multiplier

/ˌmʌltɪˈplaɪə/

% interest

/ˈɪntrest/

principal

/ˈprɪnsɪpl/

% simple interest

/ˈsɪmpl ˈɪntrest/

compound interest

/ˈkɒmpaʊnd ˈɪntrest/

Computer Science

Topic 2 · Data transmission

payload

/ˈpeɪləʊd/

trailer

/ˈtreɪlə/

address

/əˈdres/

packet switching

/ˈpækɪt ˈswɪtʃɪŋ/

routers

/ˈruːtəz/

→ serial

/ˈsɪəriəl/

= parallel

/ˈpærəlel/

→ simplex /'simpleks/			
↔ half-duplex /hɑ:f 'dju:pleks/			
↔ full-duplex /fʊl 'dju:pleks/			
🔌 universal serial bus /ju:ni'vɜ:sl 'sɪəriəl bʌs/			
📏 interface /'intəfeɪs/			
⚡ interference /ˌɪntə'fɪərəns/			
⚖ parity check /'pærɪti tʃek/			
🕒 parity bit /'pærɪti bɪt/			
Σ checksum /'tʃeksəm/			
↩ echo check /'ekəʊ tʃek/			
↺ automatic repeat request /ɔ:tə'mætɪk rɪ'pi:t rɪ'kwɛst/			
✓ acknowledgements /ək'nɒlɪdʒmənts/			
🕒 timeout /'taɪmaʊt/			

Economics

Topics 1–2 · The basic economic problem, The allocation of resources

 **unemployment**

/ʌnem'plɔimənt/

 **trade-off**

/treɪd ɒf/

 **economic growth**

/i:kə'nɒmɪk grəʊθ/

 **economic decline**

/i:kə'nɒmɪk dɪ'klaɪn/

 **non-renewable resources**

/nɒn rɪ'nju:əbl rɪ'zɔ:sɪz/

 **microeconomics**

/,maɪkrəʊ,i:kə'nɒmɪks/

 **macroeconomics**

/,mækrə,ri:kə'nɒmɪks/

 **market**

/'mɑ:kit/

 **price mechanism**

/praɪs 'mekənɪzəm/

 **allocate**

/'æləkeɪt/

 **signalling**

/'sɪgnəlɪŋ/

 **incentive**

/ɪn'sentɪv/

 **rationing**

/'ræʃənɪŋ/

 **demand**
/dɪ'mænd/

English

Topic 1 · Reading skills

 **repetition**
/ˌrepə'tɪʃn/

 **inference**
/ɪnfə'rens/

 **implies**
/ɪm'plaɪz/

 **attitude**
/ə'tɪtju:d/

 **word choice**
/wɜ:d tʃɔɪs/

 **multiple-choice**
/ˈmʌltɪpl tʃɔɪs/

 **context**
/'kɒntekst/
