
Morning Reading

Grade 10 · Week 9

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

Reading

Read the passage aloud twice.

Take off a wool hat on a dry winter day and your hair stands up. Rubbing gives your hair extra **electric charge**. Charges push and pull: like charges **repel**, opposite charges **attract**. When charge flows through a wire, we call it an **electric current**. A battery gives **direct current**, which flows one way. The sockets at home give **alternating current**, which changes direction many times each second.

When you type an address into a browser, you use the **world wide web**. Every device on the **internet** has an **IP address**, like a house number. Your browser asks a **web server** for the page, and the server sends it back to you.

Where does your money sleep at night? In a bank. **Commercial banks** keep savings safe and lend money to firms. The **central bank** is the bank of the whole country: it prints the money and sets the **interest rate**, the price of **borrowing**.

Talk about it :

1. Why does your hair stand up after you take off a wool hat?
2. If the interest rate rises, will people save more or borrow more? Why?

Physics

Topics 3–4 · Waves, Electricity and magnetism

 **virtual image**

/ˈvɜːtʃʊəl ˈɪmɪdʒ/

 **magnifying glass**

/ˈmæɡnɪfaɪɪŋ ɡlæs/

 **prism**

/ˈprɪzəm/

 **spectrum**

/ˈspektrəm/

(☞) electromagnetic spectrum

/ɪˌlektərəmæg'netɪk 'spektrəm/

↗ dispersion

/dɪ'spɜːʃn/

○ monochromatic

/ˌmɒnəʊkrəʊ'mætɪk/

⊖ vacuum

/'vækjuːm/

(☞) radio waves

/'reɪdɪəʊ weɪvz/

☼ ultraviolet

/ˌʊltrə'vaɪələɪt/

[] X-rays X

/eks reɪz/

⚡ gamma rays

/'gæmə reɪz/

🔊 sound

/saʊnd/

✕ compression

/kəm'preʃn/

<> rarefaction

/ˌreəri'fækʃn/

≡ medium

/'miːdiəm/

🔊 echo

/'ekəʊ/

🧲 magnet

/'mæɡnɪt/

⌚ temporary magnet

/'tempərəri 'mæɡnɪt/

🧲 permanent magnet

/'pɜːmənənt 'mæɡnɪt/

↑ north pole

/nɔːθ pəʊl/

↓ **south pole**

/saʊθ pəʊl/

🧲 **magnetic material**

/mæg'netɪk mə'tɪəriəl/

Chemistry

Topics 6–7 · Chemical reactions, Acids, bases and salts

🔥 **exothermic**

/egzə'tɜːmɪk/

🏭 **Haber process**

/'heɪbə 'prəʊses/

⚙️ **Contact process**

/'kɒntækt 'prəʊses/

🔥 **methane**

/'miːθeɪn/

≡ **nitrogen**

/'naɪtrədʒɪn/

🧲 **iron**

/'aɪən/

🔥 **sulfur**

/'sʌlfɜː/

⊗ **vanadium(V) oxide**

/væ'neɪdɪəm 'bɒksaɪd/

🤝 **compromise**

/'kɒmprəmaɪz/

oxidation number

/ˌɒksɪ'deɪʃn 'nʌmbə/

↑ **oxidising agent**

/'ɒksɪdaɪzɪŋ 'eɪdʒənt/

↓ **reducing agent**

/'rɪ'djuːsɪŋ 'eɪdʒənt/

⚗️ **potassium
manganate(VII)**

/pə'tæsiəm 'mæŋɡəneɪt/

 potassium iodide /pə'tæsiəm 'aɪədaɪd/			
 iodine /'aɪədiːn/			
 acid /'æsaɪd/			
 strong acid /'strɒŋ 'æsaɪd/			
 hydrochloric acid /ˌhaɪdrə'klɔːrɪk 'æsaɪd/			
 weak acid /'wiːk 'æsaɪd/			
 ethanoic acid /ˌeθə'nəʊɪk 'æsaɪd/			
 salt /sɒlt/			
 carbonates /'kɑːbəneɪts/			

Biology

Topics 7–10 · Human nutrition, Transport in animals, Diseases and immunity

 coronary arteries /'kɒrənəri 'ɑːtəriz/			
 oxygenated blood /'ɒksɪdʒenətɪd bləd/			
 deoxygenated blood /diː'ɒksɪdʒenətɪd bləd/			
 atrioventricular valves /ˌeɪtrɪəʊvən'trɪkjələ vælvz/			
 semilunar valves /ˌsemi'lunə vælvz/			
 contract /'kɒntrækt/			

 pulse /pʌls/			
 heart rate /hɑ:t reɪt/			
 coronary heart disease /'kɒrənəri hɑ:t dɪ'zi:z/			
 risk factors /rɪsk 'fæktəz/			
 lumen /'lu:men/			
 arteries /'ɑ:təriz/			
 veins /veɪnz/			
 aorta /eɪ'ɔ:tə/			
 vena cava /'vi:nə 'kɑ:və/			
 pulmonary artery /'pʌlmənəri 'ɑ:təri/			
 pulmonary vein /'pʌlmənəri veɪn/			
 renal artery /'ri:nl 'ɑ:təri/			
 renal vein /'ri:nl veɪn/			
 hepatic artery /he'pætɪk 'ɑ:təri/			
 hepatic vein /he'pætɪk veɪn/			
 hepatic portal vein /he'pætɪk 'pɔ:tl veɪn/			
 haemoglobin /hi:mə'gləʊbɪn/			

 **white blood cells**
/waɪt blʌd selz/

 **platelets**
/'pleɪtlɪts/

 **clot**
/klɒt/

 **plasma**
/'plæzmə/

 **urea**
/ju:'riə/

 **hormones**
/'hɔ:məʊnz/

 **phagocytes**
/'fægəsaɪts/

 **phagocytosis**
/ˌfægəsi'təʊsɪs/

 **lymphocytes**
/'lɪmfəsaɪts/

 **antibodies**
/'æntɪbɒdiz/

 **fibrinogen**
/'fɪbrɪnədʒɪn/

 **fibrin**
/'fɪbrɪn/

 **pathogen**
/'pæθədʒɪn/

Mathematics

Topics 3–4 · Coordinate geometry, Geometry

 **horizontal**
/ˌhɒrɪ'zɒntl/

 **vertical**
/'vɜ:tɪkl/

⊙ origin /'ɒrɪdʒɪn/			
⊞ quadrants /'kwɒdrənts/			
— line segment /laɪn 'seɡmənt/			
↔ length /leŋθ/			
△ Pythagoras' theorem /paɪ'θæɡərəs 'θɪərəm/			
• midpoint /'mɪdpoɪnt/			
= parallel /'pærəlel/			
⊥ perpendicular /ˌpɜːpən'dɪkjələ/			
□ right angle /raɪt 'æŋɡl/			
↗ perpendicular bisector /ˌpɜːpən'dɪkjələ baɪ'sektə/			
• vertex /'vɜːteks/			
› acute angle /ə'kjʊt 'æŋɡl/			
» obtuse angle /ɒb'tjuːs 'æŋɡl/			
↻ reflex angle /'rɪːfleks 'æŋɡl/			
× vertically opposite angles /'vɜːtɪkli 'ɒpəzɪt 'æŋɡlz/			

Computer Science

Topic 5 · The internet and its uses

 **rendering**

/ˈrendərɪŋ/

 **hypertext markup language**

/ˈhaɪpətɛkst ˈmɑːkʌp ˈlæŋɡwɪdʒ/

 **IP address**

/ˌaɪ ˈpiː əˈdres/

 **domain name service**

/dəˈmeɪn neɪm ˈsɜːvɪs/

 **web server**

/web ˈsɜːvə/

 **session**

/ˈseʃn/

 **persistent**

/pəˈsɪstənt/

 **user preferences**

/ˈjuːzə ˈprefrənsɪz/

 **digital currency**

/ˈdɪdʒɪtl ˈkærənsi/

 **electronic form**

/ɪlekˈtrɒnɪk fɔːm/

 **blockchain**

/ˈblɒkʃeɪn/

 **digital ledger**

/ˈdɪdʒɪtl ˈledʒə/

 **transaction**

/trænˈsækʃn/

 **timestamp**

/ˈtaɪmstæmp/

 **hash value**

/hæʃˈvæljuː/

 cyber security /'saɪbə sɪ'kjʊərɪti/			
 brute force attack /bru:t fɔ:s ə'tæk/			
 data interception /'deɪtə ,ɪntə'sepʃn/			
 distributed denial of service /'dɪstrɪbjʊ:tɪd dɪ'naɪəl ɒv 'sɜ:vɪs/			
 hacking /'hækɪŋ/			

Economics

Topic 3 · Microeconomic decision-makers

% interest rate /'ɪntrest reɪt/			
 commercial banks /kə'mɜ:ʃl bæŋks/			
 household /'haʊshəʊld/			
 saving /'seɪvɪŋ/			
 borrowing /'bɒrəʊɪŋ/			
 confidence /'kɒnfɪdəns/			
 occupation /ˌɒkjʊ'peɪʃn/			
 skill /skɪl/			
 qualifications /ˌkwɒlɪfɪ'keɪʃnz/			
 trade unions /treɪd 'ju:niənz/			

✖ **discrimination**

/dɪˌskrɪmɪˈneɪʃn/

↗ **division of labour**

/dɪˈvɪʒn Òv ˈleɪbə/

⊕ **specialisation**

/ˌspeʃəlaɪˈzeɪʃn/

English

Topics 4–5 · Writing a formal letter or email, Writing a report

😊 **polite**

/pəˈlaɪt/

♥ **grateful**

/ˈɡreɪtfl/

📄 **report**

/rɪˈpɔ:t/

📅 **event**

/ɪˈvent/

📍 **situation**

/ˌsɪtʃuːˈeɪʃn/

✓ **facts**

/fæktz/

✓ **factual**

/ˈfæktʃu:əl/