
Morning Reading

Grade 10 · Week 5

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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On a cold morning, a metal spoon feels colder than a wooden one, but they have the same temperature. Metal is a good **thermal conductor**: it carries heat away from your warm hand quickly. Wood is a **thermal insulator**. Your coat does not make heat; it traps air, which is a poor conductor, so your body's heat stays close to you. Water needs a lot of energy to warm up because it has a high **specific heat capacity**.

Inside every computer, the processor repeats the **fetch-execute cycle** many millions of times each second. Instructions wait in **memory**, small fast **registers** hold the data being used right now, and a **cache** keeps popular data near the processor, like a pencil case on your desk.

In the market, sellers respond to prices. The **law of supply** says a higher price usually raises the **quantity supplied**. When demand and supply meet, the market reaches **equilibrium**. If the price is set too low, there is a **shortage**.

Talk about it :

1. Why does a metal chair feel colder than a plastic one in the same room?
2. Concert tickets sell out in one minute. Is the price too high or too low? Explain.

Physics

Topic 1 · Motion, forces and energy

 **limit of proportionality**

/ˈlɪmɪt ɒv prəˌpɔːʃəˈnælɪti/

 **spring constant**

/sprɪŋ ˈkɒnstənt/

 **friction**

/ˈfrɪkʃn/

 **moment**

/ˈməʊmənt/

 **pivot**

/ˈpɪvət/

 **equilibrium**

/ˌiːkwɪˈlɪbrɪəm/

 **centre of gravity**

/ˈsentə ɒv ˈɡrævɪti/

 **lamina**

/ˈlæmɪnə/

 **stable**

/ˈsteɪbl/

 **impulse**

/ˈɪmpʌls/

 **stored**

/stoːd/

 **transferred**

/trænsˈfɜːd/

 **kinetic**

/kɪˈnetɪk/

 **chemical**

/ˈkemɪkl/

 **elastic (strain)**

/ɪˈlæstɪk/

 nuclear /'nju:klɪə/			
 electrostatic /ɪˌlektɹəʊ'stætɪk/			
 internal (thermal) /ɪn'tɜ:nl/			
 Sankey diagram /'sæŋki 'daɪəgræm/			
 wasted /'weɪstɪd/			
 work done /wɜ:k dʌn/			
 joule /dʒu:l/			
 power /'paʊə/			

Chemistry

Topics 2–3 · Atoms, elements and compounds, Stoichiometry

 metallic bonding /mə'tæɪlɪk 'bɒndɪŋ/			
 malleability /ˌmælə'bɪlɪti/			
 ductility /dʌk'tɪlɪti/			
 stoichiometry /ˌstəʊɪkɪ'ɒmətri/			
 formula /'fɔ:mjələ/			
 molecular formula /mə'lekjələ 'fɔ:mjələ/			
 empirical formula /em'pɪrɪkl 'fɔ:mjələ/			

 relative formula mass			
<i>/ˈrelatɪv ˈfɔːmjʊlə məs/</i>			
 molar mass			
<i>/ˈməʊlə məs/</i>			
 molar gas volume			
<i>/ˈməʊlə ɡæs ˈvɒljʊːm/</i>			
% percentage composition by mass			
<i>/pəˈsentɪdʒ ˌkɒmpəˈzɪʃn baɪ məs/</i>			
 percentage purity			
<i>/pəˈsentɪdʒ ˈpjʊərɪti/</i>			
% percentage yield			
<i>/pəˈsentɪdʒ ˈjiːld/</i>			
÷ ratio			
<i>/ˈreɪʃiəʊ/</i>			
 spectator ions			
<i>/spekˈteɪtə ˈaɪənz/</i>			
= ionic equation			
<i>/aɪˈɒnɪk ɪˈkweɪʃn/</i>			
T word equation			
<i>/wɜːd ɪˈkweɪʃn/</i>			
Σ symbol equation			
<i>/ˈsɪmbl ɪˈkweɪʃn/</i>			
→ reactants			
<i>/rɪˈæktənts/</i>			
 products			
<i>/ˈprɒdʌkts/</i>			
 balanced			
<i>/ˈbælənst/</i>			

Biology

Topics 4–6 · Biological molecules, Enzymes, Plant nutrition



fats

/fæts/



carbon

/'kɑ:bən/



hydrogen

/'haɪdrədʒn/



nitrogen

/'naɪtrədʒn/



starch

/sta:tʃ/



glycogen

/'glʌɪkədʒn/



glucose

/'glu:kəʊs/



amino acids

/ə'mi:nəʊ 'æsaɪdz/



fatty acids

/'fæti 'æsaɪdz/



glycerol

/'glɪsərol/



iodine solution

/'aɪədi:n sə'lu:ʃn/



reducing sugars

/rɪ'dju:sɪŋ 'ʃʊgəz/



Benedict's solution

/'benɪdɪkts sə'lu:ʃn/



biuret

/'bɪju:rət/



ethanol

/'eθənl/

 emulsion /ɪ'mʌljən/			
 vitamin /'vɪtəmin/			
 strands /strændz/			
 double helix /'dʌbl 'hi:lɪks/			
 bases /'beɪsɪz/			
 bonds /bɒndz/			
 catalyst /'kætəlist/			
 rate /reɪt/			
 chemical reaction /'kemɪkl rɪ'ækʃn/			
 enzymes /'enzaimz/			
 active site /'æktɪv saɪt/			
 substrate /'sʌbstreɪt/			
 complementary /,kɒmplɪ'mentəri/			
 enzyme-substrate complex /'enzaim 'sʌbstreɪt 'kɒmpleks/			
 products /'prɒdʌkts/			
 specific /spə'sɪfɪk/			

 **collisions**
/kə'liʒnz/

 **optimum temperature**
/'ɒptɪməŋ 'temprɪtʃə/

 **denatured**
/'denətʃəd/

 **raw materials**
/rɔː mə'tɪəriəlz/

 **pigment**
/'pɪgmənt/

Mathematics

Topics 1–2 · Number, Algebra and graphs

 **lower bound**
/'ləʊə baʊnd/

 **upper bound**
/'ʌpə baʊnd/

 **area**
/'eəriə/

 **time zone**
/taɪm zəʊn/

 **exchange rate**
/eks'tʃeɪndʒ reɪt/

 **algebra**
/'ældʒɪbrə/

 **variable**
/'veəriəbl/

 **substitute**
/'sʌbstɪtjuːt/

 **term**
/tɜːm/

 **expression**
/ek'spreʃn/

 **like terms**
/laɪk tɜːmz/

× **coefficient**
/ˌkəʊɪˈfɪjənt/

[] **expand**
/ekˈspænd/

[] **brackets**
/ˈbrækɪts/

↗ ↘ **factorise**
/ˈfæktəraɪz/

□ **difference of two squares**
/ˈdɪfrəns ɒv tuː skweəz/

□ **perfect square**
/ˈpɜːfekt skweə/

Computer Science

Topic 3 · Hardware

🔌 **control bus**
/kənˈtrəʊl bʌs/

⏮ **program counter**
/ˈprəʊgræm ˈkaʊntə/

📍 **memory address register**
/ˈmeməri əˈdres ˈredʒɪstə/

📦 **memory data register**
/ˈmeməri ˈdeɪtə ˈredʒɪstə/

⏮ **current instruction register**
/ˈkʌrənt ɪnˈstrʌkʃn ˈredʒɪstə/

+ **accumulator**
/əˈkjuːmjəleɪtə/

 **fetch-execute cycle**

/fetʃ'eksɪkjʊ:t 'saɪkl/

 **memory**

/'meməri/

 **Cache**

/kæʃ/

 **cores**

/kɔːz/

 **clock speed**

/klɒk spiːd/

 **embedded system**

/em'bedɪd 'sɪstəm/

 **barcode scanner**

/'bɑːkəʊd 'skænə/

 **QR code scanner**

/ˌkjuː 'ɑː kəʊd 'skænə/

 **optical mouse**

/'ɒptɪkl maʊs/

 **sensors**

/'sensəz/

 **touch screen**

/tʌtʃ skriːn/

 **resistive**

/rɪ'zɪstɪv/

 **capacitive**

/kə'pæsɪtɪv/

 **infrared**

/ˌɪnfərə'red/

Economics

Topic 2 · The allocation of resources

↗ **direct relationship**

/daɪ'rekt rɪ'leɪʃənʃɪp/

quantity supplied

/'kwɒntəti sə'plaɪd/

↗ **supply curve**

/sə'plaɪ kɜ:v/

💰 **costs of production**

/kɒsts ɒv prə'dʌkʃn/

🔧 **technology**

/tek'nɒlədʒi/

🏛️ **tax**

/tæks/

📺 **subsidy**

/'sʌbsɪdi/

⚖️ **equilibrium**

/'i:kwi'libriəm/

🔄 **disequilibrium**

/'di:si:kwi'libriəm/

↗ **excess demand**

/ek'ses dɪ'mænd/

📦 **shortage**

/'ʃɔ:tɪdʒ/

↗ **excess supply**

/ek'ses sə'plaɪ/

📦 **surplus**

/'sɜ:pləs/

↕ **price elasticity of demand**

/praɪs ɪlə'stɪsɪti ɒv dɪ'mænd/

English

Topic 2 · Writing: purpose, audience and accuracy

 **informal**

/ɪnˈfɔːml/

 **slang**

/slæŋ/

 **plan**

/plæn/

 **linking words**

/ˈlɪŋkɪŋ wɜːdz/

 **range**

/reɪndʒ/

 **accuracy**

/ˈækjʊərəsi/

 **tenses**

/ˈtensɪz/