
Morning Reading

Grade 10 · Week 11

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

Reading

Read the passage aloud twice.

Imagine you open a milk-tea shop. Some costs stay the same every month, such as the rent. These are **fixed costs**. Other costs rise when you sell more, such as milk and cups. These are **variable costs**. Add them together for the **total cost**. The money coming in from sales is your **revenue**. If a new shop opens across the street, that is **competition**, and you may have to lower your price.

Protect the shop's computer too. Use a strong **password**, and turn on **two-step verification**, so a thief needs your phone as well. A **firewall** checks the traffic between your computer and the internet. Some systems use **biometrics**, such as a fingerprint, to check who you are.

In the electricity lab, you measured **resistance** in **ohms**. A long thin wire resists the current more than a short thick one. A **variable resistor** lets you turn the current up and down, like a volume knob.

Talk about it :

1. List two fixed costs and two variable costs of a milk-tea shop.
2. Which is safer: one strong password, or two-step verification? Why?

Physics

Topic 4 · Electricity and magnetism

 **electron**

/ɪˈlektɹən/

 **charging by friction**

/ˈtʃɑːdʒɪŋ baɪ ˈfrɪkʃn/

 **conductor**

/kənˈdʌktə/

 **insulator**

/ˈɪnsjuːleɪtə/

 **coulomb**

/ˈkuːlɒm/

 **ion**

/ˈaɪɒn/

 **ampere**

/ˈæmpɪə/

 **ammeter**

/ˈæmɪtə/

 **free electrons**

/friː ɪˈlektɹɒnz/

 **mains supply**

/meɪnz səˈplaɪ/

 **power supply**

/ˈpaʊə səˈplaɪ/

 **electrical power**

/ɪˈlektɹɪkl ˈpaʊə/

 **electrical energy**

/ɪˈlektɹɪkl ˈenədʒi/

 **volt**

/vəʊlt/

 **electromotive force**

/ɪˌlektɹəʊˈmɒtɪv fɔːs/

 circuit /'sɜ:kɪt/			
 potential difference /pə'tenʃl 'dɪfrəns/			
 potential divider /pə'tenʃl dɪ'vaɪdə/			
 voltmeter /'vɒltmɪ:tə/			
 resistance /rɪ'zɪstəns/			
 total resistance /'təʊtl rɪ'zɪstəns/			
 ohm /əʊm/			
 directly proportional /daɪ'rektli prə'pɔ:ʃənl/			

Chemistry

Topics 7–8 · Acids, bases and salts, The Periodic Table

 filter /'fɪltə/			
 evaporate /ɪ'væpəreɪt/			
 crystallise /'krɪstəlaɪz/			
 precipitation /prɪ'sɪpɪ'teɪʃn/			
 water of crystallisation /'wɔ:tə ɒv 'krɪstəlaɪ'zeɪʃn/			
 transition elements /træn'sɪʃn 'elɪmənts/			
 alkali metals /'ælkəlaɪ 'metlz/			

 lithium /'liθiəm/			
 sodium /'səʊdiəm/			
 potassium /pə'tæsiəm/			
 soft /sɒft/			
 trends /'trendz/			
 reactivity /riæk'tiviti/			
 halogens /'hælədʒnz/			
 diatomic /ˌdaɪə'tɒmɪk/			
 halide /'hælaɪd/			
 displacement reaction /dɪ'spleɪsmənt ri'ækʃn/			
 coloured /'kɒləd/			

Biology

Topics 11–14 · Gas exchange in humans, Respiration, Excretion in humans, Coordination and response

 goblet cells /'gɒblət selz/			
 protein synthesis /'prəʊtiːn 'sɪnθəsis/			
 nerve impulses /nɜːv 'ɪmpʌlsɪz/			
 aerobic respiration /eə'reʊbɪk ,respi'reɪʃn/			

	anaerobic respiration <i>/ˌæneəˈrəʊbɪk ˌrespiˈreɪʃn/</i>			
	alcohol <i>/ˈælkəhɒl/</i>			
	lactic acid <i>/ˈlæktɪk ˈæsɪd/</i>			
	oxygen debt <i>/ˈɒksɪdʒn det/</i>			
	kidneys <i>/ˈkɪdnɪz/</i>			
	urine <i>/ˈjʊərɪn/</i>			
	ureters <i>/ˈjʊəretəz/</i>			
	bladder <i>/ˈblædə/</i>			
	urethra <i>/jʊəˈriːθrə/</i>			
	dialysis <i>/daɪˈæləsɪs/</i>			
	renal cortex <i>/ˈriːnl ˈkɔːteks/</i>			
	medulla <i>/ˈmedʌlə/</i>			
	nephrons <i>/ˈnefrɒnz/</i>			
	filtration <i>/fɪlˈtreɪʃn/</i>			
	glomerulus <i>/ˈglɒməɾjʊləs/</i>			
	reabsorption <i>/riːbˈsɔːpsɪn/</i>			
	deamination <i>/ˌdiːmɪˈneɪʃn/</i>			

 toxic /'tɒksɪk/			
 coordinate /'kəʊ'ɔːdɪneɪt/			
 nervous system /'nɜːvəs 'sɪstəm/			
 central nervous system /'sentrəl 'nɜːvəs 'sɪstəm/			
 spinal cord /'spainl kɔːd/			
 peripheral nervous system /'pə'rɪfərəl 'nɜːvəs 'sɪstəm/			
 regulates /'regjuleɪts/			
 sensory neurones /'sensəri 'njuːrəʊnz/			
 relay neurones /'riːleɪ 'njuːrəʊnz/			
 motor neurones /'məʊtə 'njuːrəʊnz/			
 reflex /'riːfleks/			
 response /'rɪ'spɒns/			
 stimulus /'stɪmjələs/			
 reflex arc /'riːfleks ɑːk/			
 receptor /'rɪ'septə/			
 effector /'ɪfektə/			

Mathematics

Topic 4 · Geometry

 **regular polygon**

/ˈregjʊlə ˈpɒlɪɡən/

 **pentagon**

/ˈpentæɡən/

 **hexagon**

/ˈheksæɡən/

 **octagon**

/ˈɒktæɡən/

 **interior angle**

/ɪnˈtɪəriə ˈæŋɡl/

 **exterior angle**

/ekˈstɪəriə ˈæŋɡl/

 **line symmetry**

/laɪn ˈsɪmətri/

 **rotational symmetry**

/rəʊˈteɪʃənl ˈsɪmətri/

 **plane of symmetry**

/pleɪn ɒv ˈsɪmətri/

 **axis of symmetry**

/ˈæksɪs ɒv ˈsɪmətri/

 **circle**

/ˈsɜːkl/

 **centre**

/ˈsentə/

 **radius**

/ˈreɪdiəs/

 **diameter**

/daɪˈæmɪtə/

 **circumference**

/sɜːˈkʌmfərəns/

— chord

/kɔ:d/

Computer Science

Topics 5–6 · The internet and its uses, Automated and emerging technologies



proxy server

/'prɒksi 'sɜ:və/



automated system

/'ɔ:təmeɪtɪd 'sɪstəm/



environment

/en'vaɪrənmənt/



human intervention

/'hju:mən ,ɪntə'venʃn/



central heating

/'sentrəl 'hi:tɪŋ/



chemical process

/'kemɪkl 'prəʊses/



greenhouse

/'gri:nhaʊs/

— car park barrier

/kɑ: pɑ:k 'bæriə/



microprocessor

/,maɪkrəʊ'prəʊsesə/



stored values

/stɔ:d 'vælju:z/



agriculture

/'ægrɪkʌltʃə/



consistent

/kən'sɪstənt/



Robotics

/rəʊ'bɒtɪks/



robots

/'rəʊbɒts/

 **physical structure**

/ˈfɪzɪkl ˈstrʌktʃə/

 **mechanical**

/mɪˈkænikl/

 **electrical components**

/ɪˈlektrɪkl kəmˈpəʊnənts/

**<> programmable
instructions**

/ˈprəʊgræməbl ɪnˈstrʌkʃnz/

 **factory equipment**

/ˈfæktəri ɪˈkwɪpmənt/

Economics

Topics 3–4 · Microeconomic decision-makers, Government and the macroeconomy

— **average cost**

/ˈævərɪdʒ kɒst/

 **revenue**

/ˈrevənju:/

— **average revenue**

/ˈævərɪdʒ ˈrevənju:/

 **objectives**

/ɒbˈdʒektɪvz/

 **survival**

/səˈvaɪvl/

 **growth**

/grəʊθ/

 **competition**

/ˌkɒmpəˈtɪʃn/

 **barriers to entry**

/ˈbærɪəz tə ˈentri/

 **macroeconomy**

/ˌmækrəɪˈkɒnəmi/

 **full employment**

/fʊl emˈplɔɪmənt/

⚖ **price stability**

/praɪs stəˈbɪlɪti/

↗ **inflation**

/ɪnˈfleɪʃn/

⚖ **balance of payments**

/ˈbæləns ɒv ˈpeɪmənts/

↗ **redistribution of income**

/ˌriːˌdɪstrɪˈbjʊːʃn ɒv ˈɪŋkʌm/

English

Topics 6–7 · Writing an article, Writing a review

✦ **engage**

/enˈɡeɪdʒ/

H **title**

/ˈtaɪtl/

% **interest**

/ˈɪntrest/

¶ **introduction**

/ˌɪntrəˈdʌkʃn/

✂ **varied**

/ˈveəriəd/

☆ **review**

/rɪˈvjuː/

👁 **describes**

/dɪˈskraɪbz/