
Morning Reading

Grade 10 · Week 6

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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Music is physics you can hear. Sound travels as a **wave**. The **frequency** of the wave decides the pitch : fast waves sound high, slow waves sound low. The **amplitude** decides how loud the sound is. Light is a **transverse wave**, like a rope shaken up and down, with a **crest** at the top and a **trough** at the bottom. Sound is a **longitudinal wave**: the air is pushed forward and back. The **wavelength** is the distance from one crest to the next.

Chemists count particles in a special way. Atoms are far too small to count one by one, so they use the **mole**. One mole of any substance contains the same huge number of particles, the **Avogadro constant**.

Why are concert tickets so expensive? Fans will pay almost any price, so demand is **inelastic**. But if the price of one brand of cola rises, people simply buy another brand: that demand is **elastic**. Sellers study **price elasticity of demand** before they set prices.

Talk about it :

1. Draw a wave in the air with your finger. Point to the crest, the trough, and one wavelength.
2. Name one product you would still buy if its price doubled. Why?

Physics

Topics 1–2 · Motion, forces and energy, Thermal physics

 **watt**
/wɒt/

% efficiency
/i'fɪʃənsi/

 **pressure**
/'preʃə/

 **pascal**
/'pæskl/

 **depth**
/depθ/

 **states of matter**
/steɪts ɒv 'mætə/

 **motion**
/'məʊʃn/

 **density**
/'densɪti/

 **solid**
/'sɒlɪd/

 **liquid**
/'lɪkwɪd/

 **gas**
/gæs/

 **vibrate**
/vaɪ'breɪt/

 **kinetic energy**
/kɪ'netɪk 'enədʒi/

 **melting**
/'meltɪŋ/

 **boiling**
/'bɔɪlɪŋ/

 condensation <i>/kɒnden'seɪʃn/</i>			
 solidification <i>/sə,lɪdɪfɪ'keɪʃn/</i>			
 kinetic particle model <i>/kɪ'netɪk 'pɑ:tɪkl 'mɒdl/</i>			
 particle <i>/'pɑ:tɪkl/</i>			
 internal energy <i>/ɪn'tɜːnl 'enədʒi/</i>			
 transfer of thermal energy <i>/'trænsfɜː dv 'θɜːml 'enədʒi/</i>			
 thermal conductor <i>/'θɜːml kən'dʌktə/</i>			
 thermal insulator <i>/'θɜːml 'ɪnsjuːlətə/</i>			

Chemistry

Topics 3–4 · Stoichiometry, Electrochemistry

 state symbols <i>/steɪt 'sɪmbəlz/</i>			
 mole <i>/məʊl/</i>			
 amount of substance <i>/ə'maʊnt dv 'sʌbstəns/</i>			
 Avogadro constant <i>/,ævə'gædrəʊ 'kɒnstənt/</i>			
 solution <i>/sə'ljuːʃn/</i>			

⊖ **limiting reactant**

/ˈlɪmɪtɪŋ rɪˈæktənt/

🧪 **titration**

/taɪˈtreɪʃn/

⋮ **solute**

/ˈsɒljʊt/

⚡ **electrolysis**

/ɪlekˈtrɒləsɪs/

↗ **decomposition**

/ˌdiːkɒmpəˈzɪʃn/

🔌 **electrolytic cell**

/ɪˌlektroˈlɪtɪk sel/

🔌 **fuel cell**

/ˈfjuːəl sel/

💧 **electrolyte**

/ɪˈlektroˌlaɪt/

⊕ **anode**

/ˈænəʊd/

⊖ **cathode**

/ˈkæθəʊd/

🚫 **inert**

/ɪˈnɜːt/

💎 **platinum**

/ˈplætɪnəm/

💧 **dilute**

/daɪˈluːt/

💧 **concentrated**

/ˈkɒnsəntreɪtɪd/

Biology

Topics 6-7 · Plant nutrition, Human nutrition



sucrose

/ˈsuːkrəʊs/



phloem

/ˈfləʊɪm/



nectar

/ˈnektə/



pollination

/ˌpɒlɪˈneɪʃn/



nitrate ions

/ˈnaɪtreɪt ˈaɪənz/



magnesium ions

/mægˈniːziəm ˈaɪənz/



light intensity

/laɪt ɪnˈtensɪti/



limiting factor

/ˈlɪmɪtɪŋ ˈfæktə/



control

/kənˈtrəʊl/



gas exchange

/gæs ɛksˈtʃeɪndʒ/



indicator

/ˈɪndɪkeɪtə/



adapted

/əˈdæptɪd/



cuticle

/ˈkjuːtɪkl/



epidermis

/ˌepɪˈdɜːmɪs/



mesophyll

/ˈmesəfɪl/

 **palisade mesophyll**

/ˈpælɪseɪd ˈmesəfɪl/

 **spongy mesophyll**

/ˈspʌndʒi ˈmesəfɪl/

 **air spaces**

/eə ˈspeɪsɪz/

 **stomata**

/ˈstəʊmətə/

 **guard cells**

/gɑːd selz/

 **vascular bundles**

/ˈvæskjələ ˈbʌndlz/

 **xylem**

/ˈzaɪləm/

 **balanced diet**

/ˈbælənst ˈdaɪət/

 **calcium**

/ˈkælsɪəm/

 **mineral ions**

/ˈmɪnərəl ˈaɪənz/

 **iron**

/ˈaɪən/

 **fibre**

/ˈfaɪbə/

 **scurvy**

/ˈskɜːvi/

 **rickets**

/ˈrɪkɪts/

 **alimentary canal**

/əlaɪˈmentəri kəˈnæl/

 **oesophagus**

/ˈɪsəfəɡəs/

○ stomach			
<i>/'stʌmək/</i>			
↪ small intestine			
<i>/smɔ:l ɪn'testɪn/</i>			
↪ duodenum			
<i>/'dju:ədʊnəm/</i>			
↪ ileum			
<i>/'li:əm/</i>			
↪ large intestine			
<i>/lɑ:dʒ ɪn'testɪn/</i>			
↪ colon			
<i>/'kɒlən/</i>			

Mathematics

Topic 2 · Algebra and graphs

× ² quadratic			
<i>/kwɒ'drætɪk/</i>			
□ completing the square			
<i>/kəm'pli:tɪŋ ðə skweə/</i>			
÷ algebraic fraction			
<i>/ældʒɪ'breɪk 'frækʃn/</i>			
÷ rational expression			
<i>/'ræʃənəl ɛk'spreʃn/</i>			
= equation			
<i>/'tʃweɪʒn/</i>			
— linear			
<i>/'liːnə/</i>			
② unknown			
<i>/ʌn'nəʊn/</i>			
÷ fractional equation			
<i>/'frækʃənəl r'kweɪʒn/</i>			

 **simultaneous equations**

/ˌsɪməˈteɪniəs ɪˈkweɪʒnz/

 **quadratic formula**

/kwɒˈdrætɪk ˈfɔːmjələ/

 **change the subject**

/tʃeɪndʒ ðə ˈsʌbdʒekt/

 **inequality**

/miːˈkwɒləti/

 **number line**

/'nʌmbə laɪn/

 **region**

/'riːdʒən/

 **sequence**

/'siːkwəns/

 **term-to-term rule**

/tɜːm tə tɜːm ruːl/

Computer Science

Topic 3 · Hardware

 **actuator**

/'æktʃuːeɪtə/

 **projector**

/prəˈdʒektə/

 **inkjet printer**

/ɪŋkˈdʒet ˈprɪntə/

 **laser printer**

/'leɪzə ˈprɪntə/

 **speaker**

/'spiːkə/

 Primary storage			
/ˈpraɪməri ˈstɔːrɪdʒ/			
 random access memory			
/ˈrændəm ˈæksɪs ˈmeməri/			
 read only memory			
/riːd ˈəʊnli ˈmeməri/			
 volatile			
/ˈvɒlətaɪl/			
 non-volatile			
/nɒn ˈvɒlətaɪl/			
 Secondary storage			
/ˈsekəndəri ˈstɔːrɪdʒ/			
 magnetic storage			
/mæɡˈnetɪk ˈstɔːrɪdʒ/			
 optical storage			
/ˈɒptɪkl ˈstɔːrɪdʒ/			
 solid state storage			
/ˈsɒlɪd steɪt ˈstɔːrɪdʒ/			
 flash memory			
/flæʃ ˈmeməri/			
 virtual memory			
/ˈvɜːtʃuəl ˈmeməri/			
 network interface card			
/ˈnetwɜːk ˈɪntəfeɪs kɑːd/			
 media access control			
/ˈmiːdiə ˈæksɪs kənˈtrəʊl/			
 internet protocol			
/ˈɪntənət ˈprəʊtəkɒl/			

Economics

Topic 2 · The allocation of resources

 **determinants**

/di'tɜːmɪnənts/

 **elastic**

/ɪ'læstɪk/

 **inelastic**

/ɪnɪ'læstɪk/

 **unit elastic**

/'juːnɪt ɪ'læstɪk/

 **total revenue**

/'təʊtl 'revənjuː/

 **total expenditure**

/'təʊtl ɛk'spendɪtʃə/

 **price elasticity of supply**

/praɪs ɪlə'stɪsɪti ɒv sə'plaɪ/

 **spare capacity**

/speə kə'pæsɪti/

 **stocks**

/stɒks/

 **market economy**

/'mɑːkɪt ɪ'kɒnəmi/

 **planned economy**

/plænd ɪ'kɒnəmi/

 **market failure**

/'mɑːkɪt 'feɪlɪə/

 **inefficient**

/ɪnɪ'fɪʃənt/

 **private cost**

/'praɪvət kɒst/

English

Topics 2–3 · Writing: purpose, audience and accuracy, Writing an informal email

vocabulary

/vəʊ'kæbjʊləri/

synonyms

/'sɪnənɪmz/

grammar

/'græmə/

Aa spelling

/'speliŋ/

punctuation

/ˌpʌŋktʃu:'eɪʃn/

informal email

/ɪn'fɔːml 'iːmeɪl/

prompts

/prɒmpts/