
Morning Reading

Grade 10 · Week 1

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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Science starts with **measurement**. In the laboratory , we do not guess. We use a **ruler** to measure length, a **measuring cylinder** to measure the volume of a liquid, and a balance to measure **mass**. Good scientists measure carefully, because every measurement has a small **uncertainty**.

Everything around you is made of tiny **particles**. In a **solid**, the particles are close together and only vibrate. In a **liquid**, they can move past each other. In a **gas**, they fly around quickly and are far apart. When you smell breakfast from the kitchen, gas particles have travelled to your nose!

Economists also study the world, but they study people. People have unlimited **wants**, but **resources** are **scarce**. This is the basic **economic problem**: we cannot have everything, so we must choose.

Talk about it :

1. What did you measure this week, and what did you use to measure it?
2. You have 20 yuan and one hour of free time. What do you choose to do, and what do you give up?

Physics

Topic 1 · Motion, forces and energy

 **measurement**

/ˈmeʒəmənt/

 **ruler**

/ˈruːlə/

 **measuring cylinder**

/ˈmeʒərɪŋ ˈsɪlɪndə/

 meniscus <i>/ˈmenɪskəs/</i>			
÷ measure many and divide <i>/ˈmeʒə ˈmeni ænd dɪˈvaɪd/</i>			
 pendulum <i>/ˈpendjʊləm/</i>			
 period <i>/ˈpiəriəd/</i>			
 uncertainty <i>/ʌnˈsɜːtənti/</i>			
 magnitude <i>/ˈmæɡnɪtjuːd/</i>			
 mass <i>/mæs/</i>			
 energy <i>/ˈenədʒi/</i>			
 principle of conservation of energy <i>/ˈprɪnsɪpl ɒv ˌkɒnsəˈveɪʃn ɒv ˈenədʒi/</i>			
 principle of moments <i>/ˈprɪnsɪpl ɒv ˈməʊmənts/</i>			
 conservation of momentum <i>/ˌkɒnsəˈveɪʃn ɒv məʊˈmentəm/</i>			
 momentum <i>/məʊˈmentəm/</i>			
 temperature <i>/ˈtempərɪtʃə/</i>			
 force <i>/fɔːs/</i>			
 resultant force <i>/rɪˈzʌltənt fɔːs/</i>			
 resultant <i>/rɪˈzʌltənt/</i>			

↓ weight /weɪt/			
⌚ stopwatch /'stɒpwɒtʃ/			
🕒 digital timer /'dɪdʒɪtl 'taɪmə/			
⌚ reaction time /rɪ'ækʃn taɪm/			

Chemistry

Topic 1 · States of matter

⋯ particles /'pɑ:tɪklz/			
⊠ atoms /'ætəməz/			
⬡ molecules /'mɒlɪkjʊ:lz/			
± ions /'aɪənz/			
↻ kinetic particle theory /kɪ'netɪk 'pɑ:tɪkl 'θɪəri/			
↕ kinetic energy /kɪ'netɪk 'enədʒi/			
⚡ energy /'enədʒi/			
🔥 thermal energy /'θɜ:ml 'enədʒi/			
📦 solid /'sɒlɪd/			
💧 liquid /'lɪkwɪd/			
⇌ gas /gæs/			

 volume /'vɒljʊ:m/			
 compress /kəm'pres/			
 density /'densiti/			
 mass /mæs/			
 relative molecular mass /'relatɪv mə'lekjələ mæs/			
 separation /ˌsepə'reɪʃn/			
 arrangement /ə'reɪndʒmənt/			
 motion /'məʊʃn/			
 regular /'regjələ/			
 vibrate /vaɪ'breɪt/			
 forces of attraction /'fɔːsɪz ɒv ə'trækʃn/			

Biology

Topic 1 · Characteristics and classification of living organisms

 characteristics /ˌkærɪktə'rɪstɪks/			
 life processes /laɪf 'prəʊsesɪz/			
 organisms /'ɔːɡənɪzəmz/			
 movement /'muːvmənt/			

 respiration /ˌrespɪ'reɪʃn/			
 cells /selz/			
 nutrient molecules /ˈnjuːtriənt ˈmɒlɪkjʊːlz/			
 energy /ˈenədʒi/			
 metabolism /məˈtæbəlaɪzəm/			
 sensitivity /ˌsensɪˈtɪvɪti/			
 environment /enˈvaɪrənmənt/			
 growth /grəʊθ/			
 dry mass /draɪ mæs/			
 reproduction /rɪprəˈdʌkʃn/			
 excretion /ekˈskreʃn/			
 waste products /weɪst ˈprɒdʌkts/			
 nutrition /njuːˈtrɪʃn/			
 classify /ˈklæsɪfaɪ/			
 species /ˈspiːsiːz/			
 fertile offspring /ˈfɜːtaɪl ˈɒfsprɪŋ/			
 scientific name /saɪənˈtɪfɪk neɪm/			

	binomial system <i>/baɪ'nəʊmiəl 'sɪstəm/</i>			
	genus <i>/'dʒenəs/</i>			
	dichotomous key <i>/daɪ'kɒtəməs kiː/</i>			
	evolutionary relationships <i>/ɪvə'ljuːʃənəri rɪ'leɪʃənʃɪps/</i>			
	ancestor <i>/'ænsɛstə/</i>			
	base sequence <i>/beɪs 'siːkwəns/</i>			
	genes <i>/dʒiːnz/</i>			
	kingdoms <i>/'kɪŋdəmz/</i>			
	animal <i>/'ænɪml/</i>			
	cell wall <i>/sel wɔːl/</i>			
	plant <i>/plænt/</i>			
	photosynthesis <i>/ˌfəʊtəʊ'sɪnθəsis/</i>			
	chloroplasts <i>/'klɒːrəʊplæsts/</i>			
	fungus <i>/'fʌŋɡəs/</i>			
	moulds <i>/məʊldz/</i>			
	mushrooms <i>/'mʌʃruːmz/</i>			

Mathematics

Topic 1 · Number

natural number

/ˈnætʃərəl ˈnʌmbə/

± integer

/ˈɪntɪdʒə/

× factor

/ˈfæktə/

% remainder

/rɪˈmeɪndə/

* multiple

/ˈmʌltɪpl/

🔗 common factor

/ˈkɒmən ˈfæktə/

📦 common multiple

/ˈkɒmən ˈmʌltɪpl/

💎 prime number

/praɪm ˈnʌmbə/

◻ square number

/skweə ˈnʌmbə/

📦 cube number

/kjuːb ˈnʌmbə/

÷ rational number

/ˈræʃənl ˈnʌmbə/

🕒 fraction

/ˈfrækʃn/

π irrational number

/ɪˈræʃənl ˈnʌmbə/

↔ reciprocal

/rɪˈsɪprəkl/

📦 product

/ˈprɒdʌkt/

 **prime factor** _____
/praɪm 'fæktə/

 **highest common factor** _____
/'haɪst 'kɒmən 'fæktə/

Computer Science

Topic 1 · Data representation

 **digit** _____
/'dɪdʒɪt/

 **binary** _____
/'bʌnəri/

 **data** _____
/'deɪtə/

 **logic gate** _____
/'lɒdʒɪk geɪt/

 **processor** _____
/'prəʊsesə/

 **register** _____
/'redʒɪstə/

 **number system** _____
/'nʌmbə 'sɪstəm/

 **denary** _____
/'di:nəri/

 **hexadecimal** _____
/ˌheksə'desɪml/

 **base** _____
/beɪs/

 **place value** _____
/pleɪs 'vælju:/

 **bit** _____
/bɪt/

 **byte** _____
/baɪt/

 nibble /'nɪbl/			
 memory address /'meməri ə'dres/			
 overflow /əʊvə'fləʊ/			
>> logical binary shift /'lɒdʒɪkl 'bainəri ʃɪft/			
→ least significant bit /li:st sig'nɪfɪkənt bit/			
 two's complement /tu:z 'kɒmplɪmənt/			
← most significant bit /məʊst sig'nɪfɪkənt bit/			

Economics

Topic 1 · The basic economic problem

 resources /'rɪ'zɔ:sɪz/			
 economic problem /i:kə'nɒmɪk 'prɒbləm/			
 finite /'faɪnaɪt/			
 wants /wɒnts/			
 scarce /skeəs/			
 scarcity /'skeəsɪti/			
 goods /ɡʊdz/			

 services /'sɜ:vɪsɪz/			
 consumers /kən'su:məz/			
 workers /'wɜ:kəz/			
 producers /prə'dju:səz/			
 firms /fɜ:mz/			
 governments /'gʌvənmənts/			
 economic goods /i:kə'nɒmɪk ɡʊdz/			
 opportunity cost /ɒpə'tju:nɪti kɒst/			

English

Topic 1 · Reading skills

 skim /skɪm/			
 gist /dʒɪst/			
 paragraph /'pærəgræf/			
 scan /skæn/			
 predict /prɪ'dɪkt/			
 phrase /freɪz/			
 multiple matching /'mʌltɪpl 'mætʃɪŋ/			