



International
Benchmark
Tests in English,
Mathematics
& Science

Science

Practice Test

ABOUT THIS PRACTICE TEST

This *Practice Test* has 15 questions. It has been designed to give you an idea of the main IBT assessment.

ANSWERING THE QUESTIONS

Each question has four options. Choose the BEST answer from the four options **A, B, C or D.**

You will find the key to the answers on the last page of this booklet.

EQUIPMENT ALLOWED IN THIS PRACTICE TEST

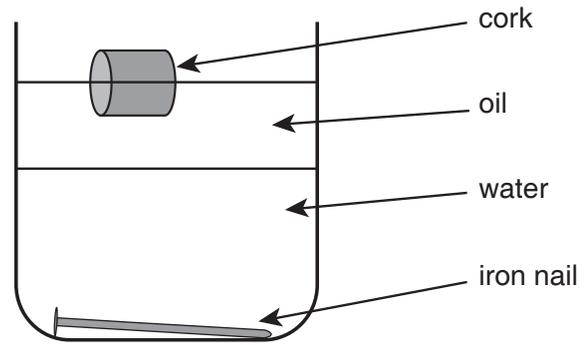
You may use a pencil for this *Practice Test*. You may **NOT** use a dictionary.

ESTIMATED TIME FOR THIS PRACTICE TEST

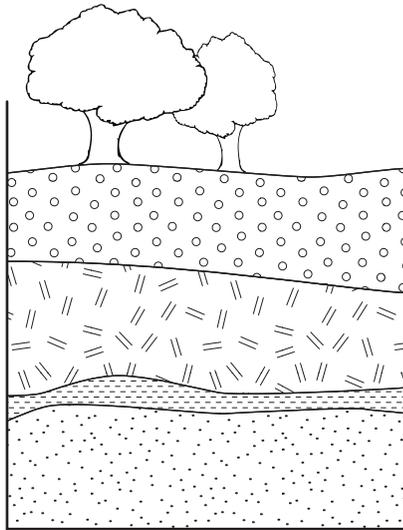
You should be able to complete this *Practice Test* in approximately 30 minutes.

1 Which of these things is the most dense?

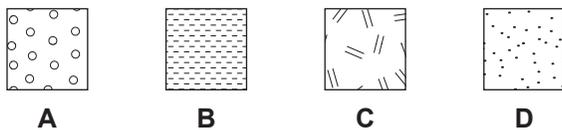
- A** cork
- B** oil
- C** water
- D** iron nail



2 Over many years, layers of sediments can form horizontal layers of rocks.



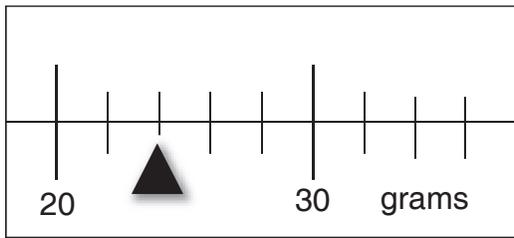
In the diagram above, which rock layer is the oldest?



3 What causes day and night on Earth?

- A** rotation of the Earth on its axis
- B** movement of the Moon around the Earth
- C** movement of the Earth around the Sun
- D** the oval-shaped orbit of the Earth around the Sun

4 Nasim weighed some sugar. The balance scale is shown below.



What was the mass of the sugar?

- A 22 g
- B 24 g
- C 25 g
- D 26 g

5 Which of these is a chemical change?



boiling water

A



melting chocolate

B



making ice

C



cooking eggs

D

6 Haneef wants to change a solid substance into a liquid, and then the liquid into a gas.

What does he need to do to cause these changes?

- A cool the substance only
- B heat the substance only
- C cool the substance then heat it
- D heat the substance then cool it

7 Food chains show how living things depend on each other for food.



➔ means “is eaten by”

What would happen to the number of insects and snakes if most of the frogs died?

	Number of insects would	Number of snakes would
A	decrease	increase
B	decrease	decrease
C	increase	increase
D	increase	decrease

8 When scientists do experiments the things they notice are called observations. Sania lit a candle and then blew it out. She wrote a list of changes she observed when the candle went out.

Which of the things that Sania wrote is **not** an observation?

- A The wick was black.
- B The flame disappeared.
- C Smoke was produced after the flame stopped burning.
- D The candle was not using oxygen once the flame stopped burning.

9 Scientists classify objects into groups like rocks, plants, animals and machines.

For scientists to place objects into the same group, what must be true?

- A All the objects must eat the same food.
- B All the objects must have the same name.
- C All the objects must live in the same environment.
- D All the objects must have some features in common.

10 This is a picture of a sunflower plant.



In which part of this sunflower plant does photosynthesis occur?

- A** the roots
- B** the stem
- C** the leaves
- D** the flowers

11 Two friends were playing on a sled in the snow.



Why do sleds slide very easily down a snowy slope but not down a grassy slope?

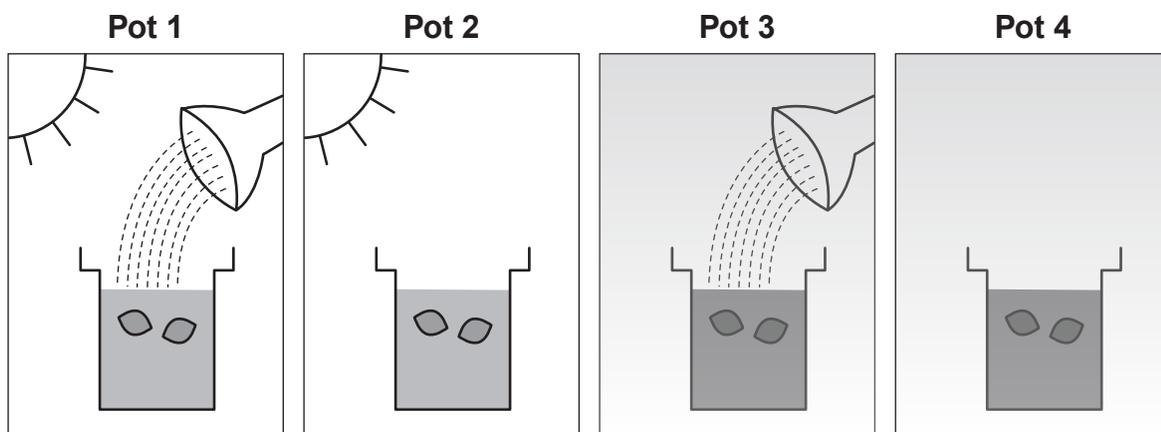
- A** There is more gravity on a snowy slope.
- B** Snow has more friction than a grassy slope.
- C** Snowy slopes are steeper than grassy slopes.
- D** There is less friction on snow than on grass.

- 12** Scientists think that the temperatures on Earth are increasing. This is called the “Greenhouse Effect”.

Which gas in the atmosphere contributes most to the **increasing** temperature on Earth?

- A oxygen
- B nitrogen
- C helium
- D carbon dioxide

- 13** The following experiment was set up to see what seeds need to start growing.



Two seeds in soil placed in sunlight and watered regularly.

Result:
the seeds started to grow

Two seeds in soil placed in sunlight and never watered.

Result:
the seeds did not start to grow

Two seeds in soil placed in a dark cupboard and watered regularly.

Result:
the seeds started to grow

Two seeds in soil placed in a dark cupboard and never watered.

Result:
the seeds did not start to grow

What can be concluded from this experiment?

- A Seeds need sunlight to start growing.
- B Seeds need water to start growing.
- C Seeds need to be in soil in order to start growing.
- D More than two seeds are needed for them to start growing.

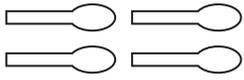
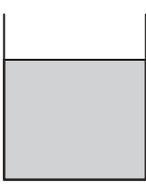
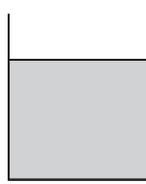
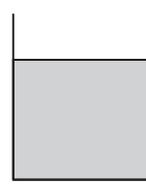
- 14** On a warm day drops of water form on the outside of the glass containing a cold drink.

How does this water form on the outside of the glass?

- A** Water from the air condenses on the cold surface.
- B** Water leaks from the inside to the outside of the glass.
- C** Water evaporates from the surface of the drink and falls to the outside.
- D** Water slides up from the drink and moves over the top of the glass onto the outside.

- 15** Sania wanted to find out how much foam was produced by a certain laundry powder when it was used in water of different temperatures.

She set up the 4 tests shown below.

	Test 1	Test 2	Test 3	Test 4
Amount of powder	 1 spoon	 2 spoons	 3 spoons	 4 spoons
Amount of water				
Temperature of water	15°C	20°C	25°C	30°C
Time of stirring	20 seconds	20 seconds	20 seconds	20 seconds

Sania's teacher said there was something wrong with the design of her experiment.

What can Sania do to improve her experiment?

- A** use less powder when the water is hotter
- B** use the same amount of powder for each test
- C** stir the liquid for more than 20 seconds
- D** use more water in the coolest jar so that all the powder dissolves

Answer Key

1.	D
2.	D
3.	A
4.	B
5.	D
6.	B
7.	D
8.	D
9.	D
10.	C
11.	D
12.	D
13.	B
14.	A
15.	B