

# Science



STUDENT NAME \_\_\_\_\_

NAME OF SCHOOL \_\_\_\_\_

### TEST INSTRUCTIONS

#### FILL IN YOUR DETAILS

Turn to your ANSWER SHEET and fill in your name, school, grade, section, today's date, your date of birth and gender.

#### ANSWERING QUESTIONS

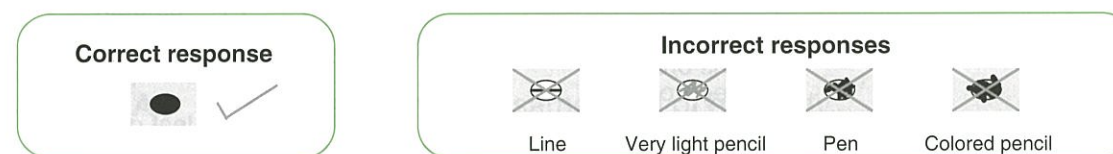
Go to the SCIENCE ANSWER SHEET.

This test has **40 QUESTIONS**. Each question has four possible options. Choose the **BEST** answer from the four options, **A, B, C** or **D**.

FILL in **ONE** circle on your answer sheet with a pencil.

If you make a mistake, erase the pencil mark and fill in a different circle.

You must colour the entire circle as shown below:



Marks are NOT deducted for incorrect answers.

**ALL ANSWERS SHOULD BE MARKED ON YOUR ANSWER SHEET ONLY.**

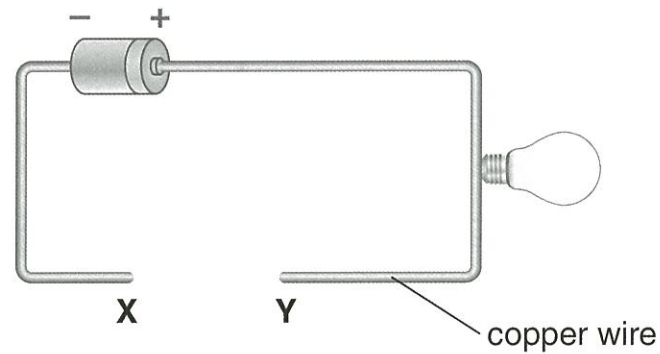
#### EQUIPMENT ALLOWED IN THIS TEST

You may use a 2B or B pencil for this test. You may NOT use a dictionary for this test.

#### TIME ALLOWED FOR TEST

The time allowed to complete this test is **60 minutes**.

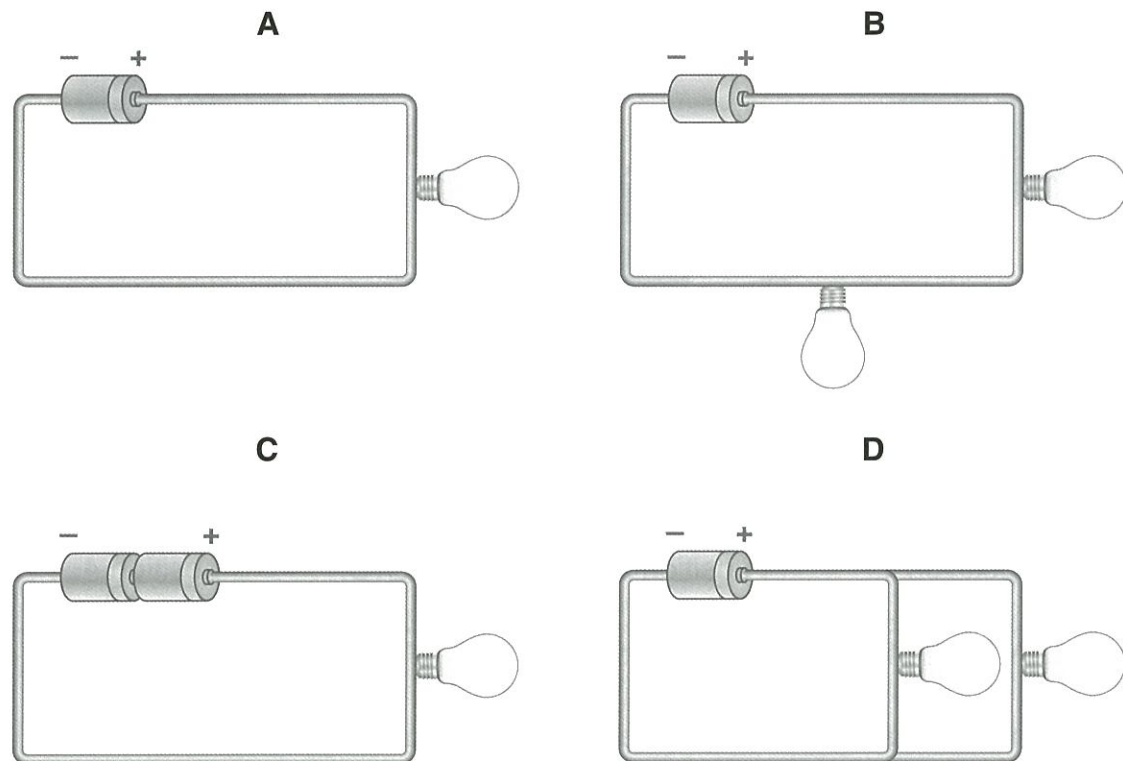
The picture shows an electric circuit.



13 Which material could connect points X and Y to make the bulb glow?

- A iron                      B rubber                      C plastic                      D wood

14 In which of these circuits will the bulb(s) glow **brightest**?



27 A river flows through the centre of a village. The river generally overflows once a year causing flooding. One year, the flood was more severe than normal.

What is the most likely reason for this?

- A fewer storms  
B higher rainfall  
C poor crop production  
D increase in vegetation

28 Which of the following will minimise the risk of flooding in the village?

- A planting trees upstream of the village  
B paving the banks of the river with cement  
C raising the river bed by dumping rocks in the river  
D building a dam across a river downstream of the village

Two sets of changes are shown in the pictures below.

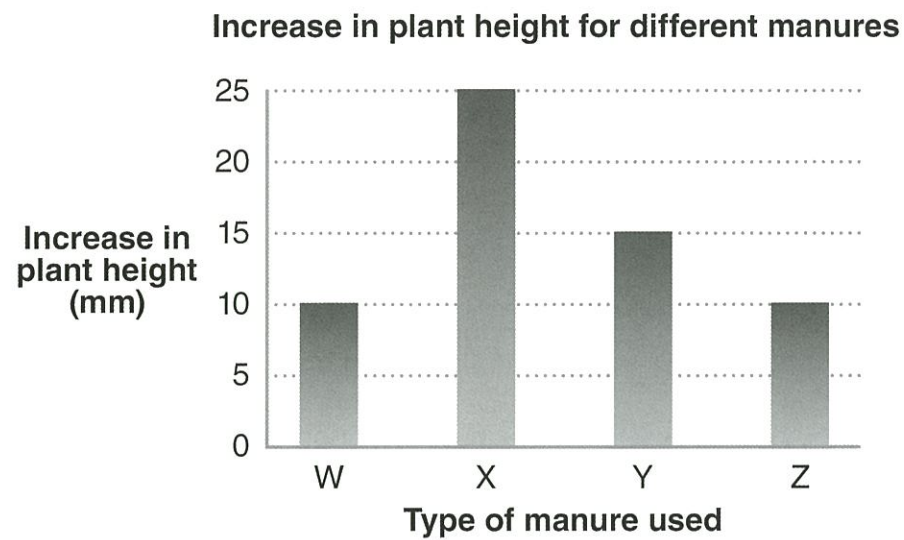
Change 1		Change 2	
	kept in a moist place for 6 months		after 5 minutes
iron chain			
	rusty iron chain	ice cube	part of ice cube melted

29 Which of the following accurately describes the two sets of changes?

Select the correct row.

	Change 1	Change 2
A	no new substance produced	new substance produced
B	chemical change	physical change
C	state of matter changed	state of matter not changed
D	no heat produced	heat produced

A gardener added equal amounts of different manures to four similar plants. She watered the plants daily with equal amounts of water. The graph shows her observations after one week.



**24** Which two types of manure had the same effect on plant growth?

- A** W and X      **B** X and Y      **C** Y and Z      **D** W and Z

**25** How can the gardener be sure that manure really does help the plants to grow?

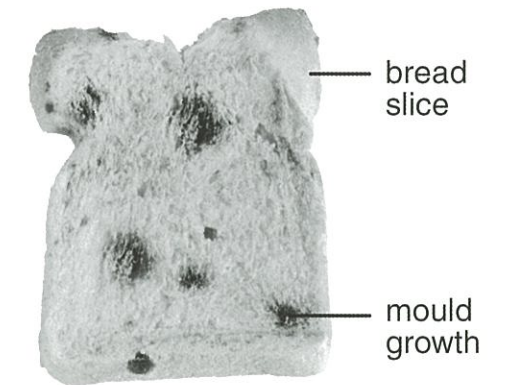
- A** Grow similar plants without manure.  
**B** Grow similar plants with a new type of manure.  
**C** Grow the four plants with only one type of manure.  
**D** Grow different plants with the four types of manure.

**26** How long does it take for the Earth to orbit the Sun, and for the Moon to orbit the Earth? Select the correct row.

	Earth to orbit the Sun	Moon to orbit the Earth
<b>A</b>	12 hours	1 hour
<b>B</b>	24 hours	12 hours
<b>C</b>	28 days	24 hours
<b>D</b>	365 days	28 days

Two slices of bread were toasted to dry them out. Two slices were left untoasted. The four slices of bread were each put in a sealed bag and kept under different conditions. The table shows the findings after two days.

Bread slice	Type of bread	Temperature	Mould on bread after two days
1	untoasted	5 °C	no
2	untoasted	25 °C	yes
3	toasted	5 °C	no
4	toasted	25 °C	no



**15** Which conditions helped the bread mould grow?

- A** warm and moist      **B** warm and dry      **C** cold and moist      **D** cold and dry





**16** How can you find out which temperature best helps bread mould grow?

- A** Perform the same experiment many times.  
**B** Perform the same experiment at a constant temperature.  
**C** Perform the same experiment using only untoasted bread.  
**D** Perform the same experiment at a range of different temperatures.

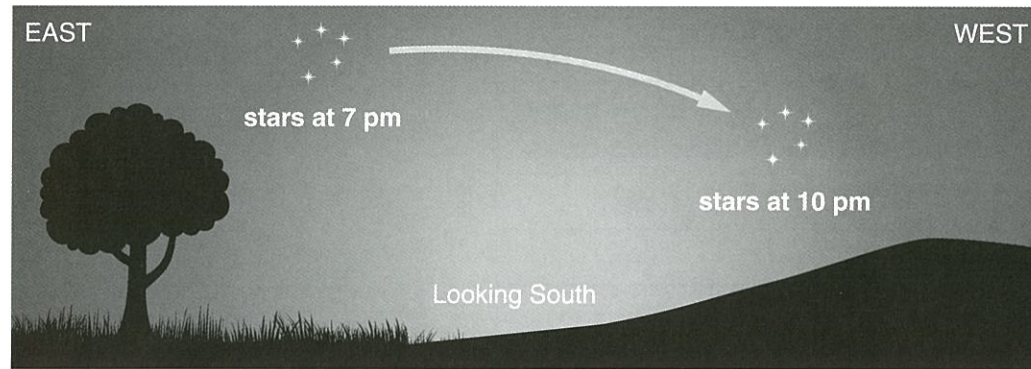
**17** The body of a starfish has a radial symmetry.



Which of these also has a radial symmetry?

- A**  A butterfly's wing      **B**  A leaf      **C**  A sunflower      **D**  A snail's shell

Jane looked at the sky at 7 pm and saw a group of stars. Three hours later, she saw that the stars were in a different position.



18 Why did the stars change position?

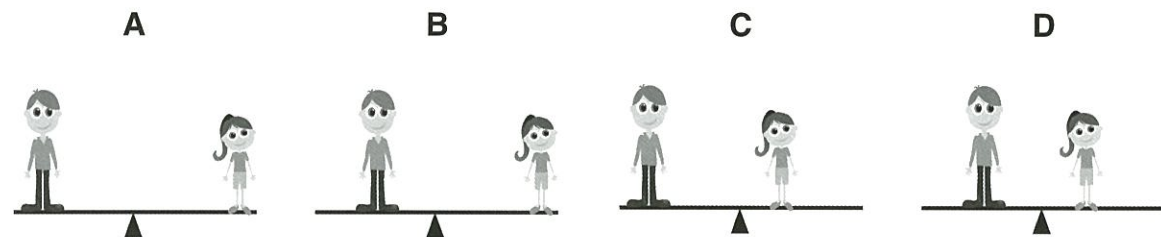
- A The stars are in constant motion.
- B The Earth had rotated from West to East.
- C The stars had rotated from East to West.
- D The stars were attracted by the Moon's gravity.

19 Why can we see planets and stars?

- A They both produce their own light.
- B They both reflect light from the Sun.
- C Light from the Earth allows us to see the planets and stars.
- D The stars make their own light and the planets reflect light.

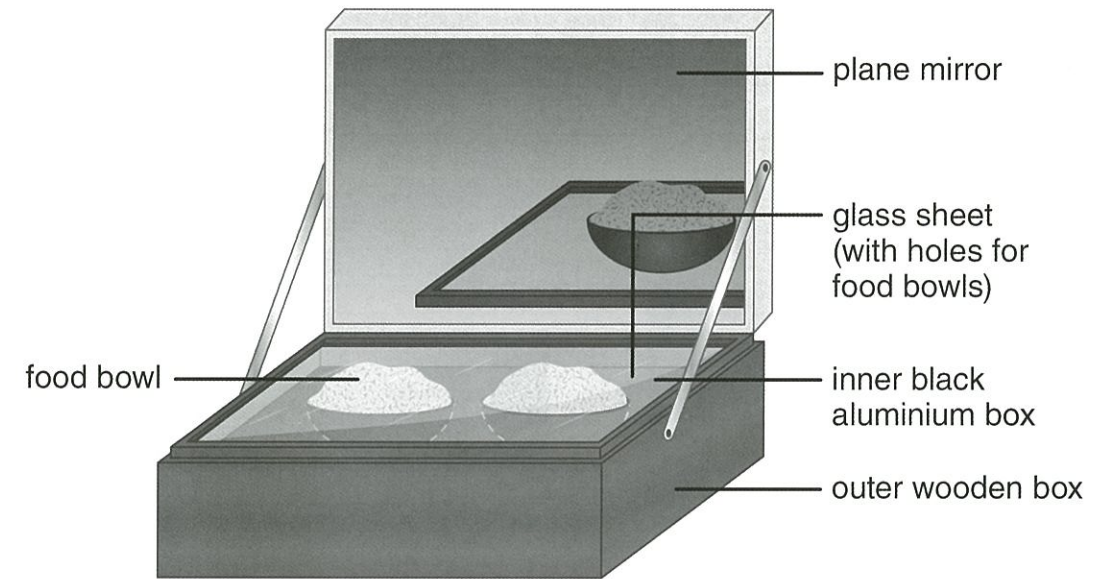
20 The boy is heavier than the girl.

Where do they need to stand to make the seesaw balance evenly?



A solar cooker uses the sun's heat to cook food.

Bowls of food are placed in a wooden box, and a sheet of glass is placed over the food.



A solar cooker

21 What reflects the sunlight into the wooden box?

- |            |             |              |                  |
|------------|-------------|--------------|------------------|
| <b>A</b>   | <b>B</b>    | <b>C</b>     | <b>D</b>         |
| food bowls | glass sheet | plane mirror | outer wooden box |

22 Why is the inside of the box painted black?

- A Black surfaces reflect most light energy.
- B Black paint deters insects from eating the food.
- C Black surfaces are good absorbers of heat energy.
- D Black paint prevents corrosion in metal boxes.

23 Fresh water falls as rain. Why is rain fresh, not salty?

- A As water rises to form clouds, the salt falls back to Earth.
- B The salt is left behind when water evaporates.
- C Rain comes from water that is on land or underneath it.
- D Clouds filter the salt out of water.