

# *Primary Science Year 5 End of Year Exam*

Preparation: You should spend time looking over the example questions provided to prepare yourself for your Science exam. Make sure you read the questions carefully and practice interpreting what they mean. Further preparation can be used with the following websites:

<http://www.bbc.co.uk/bitesize/ks2/science/>

<http://resources.woodlands-junior.kent.sch.uk/revision/science/index.html>

Select the links to each topic.

Exam Materials - Include pencils and rubbers.

Topics to revise for the exams:

- Light and shadows
- Earth and space
- Plants (parts of a flower, fertilisation, pollination, seed dispersal, plant life cycle)
- States of matter

## **Answers:**

When reading the question, make sure you read it properly. Re-read it, and make sure you've understood it. Pick out the **key words** and take a moment to think about your answer and make sure it is actually answering the question.

When you have written your answer **STOP!** Go back and re-read the question and ask yourself, "Does my answer actually answer all of that question?"

## Sample Questions:

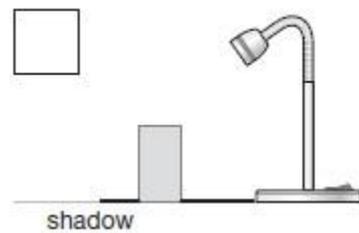
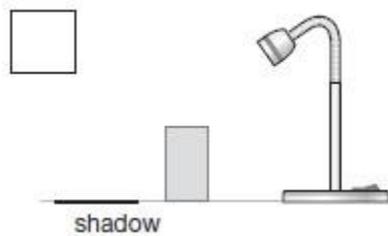
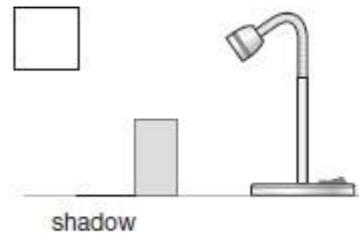
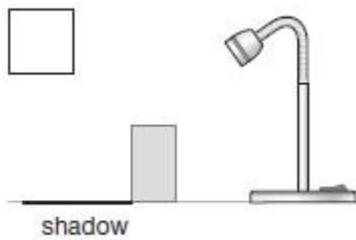
### Shadows

(a) Josh is investigating shadows. He places a block on the floor. He holds a lamp and looks at the shadow the block makes.

(i) Look at the pictures below.

Which picture shows the correct length and direction of the shadow made by the block?

Tick **one**.



1 mark

(ii) Why does a shadow form when Josh shines the light on the block?



Tick **one**.

The block is grey and shiny.

The block is smooth and rigid.

The block is solid and opaque.

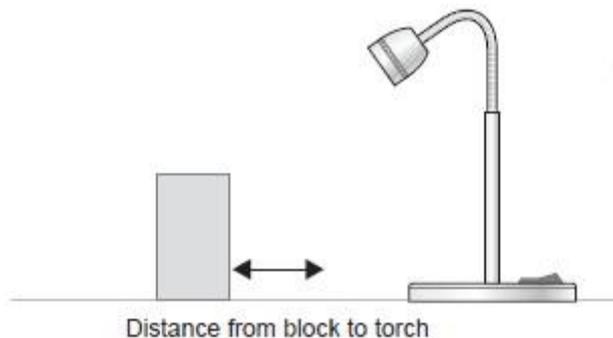
The block is hard and transparent.

1 mark

(b)

Josh investigates if the distance he puts the lamp from the block affects the length of the shadow on the floor.

Josh records his results in the table below.



Distance of lamp from block (cm)	Length of block's shadow (cm)
5	7
10	9
15	12
20	14
25	17

Describe the relationship between the **distance of the lamp** from the block and the **length of the shadow**.



1. ....
2. ....

1 mark

- (c) Josh found out that the distance of the lamp from an object does affect how long the shadow is.

He wants to find out more about how to change shadow size.

Suggest **another** investigation that Josh could carry out using the same lamp and block to find out more about how the size of a shadow changes.

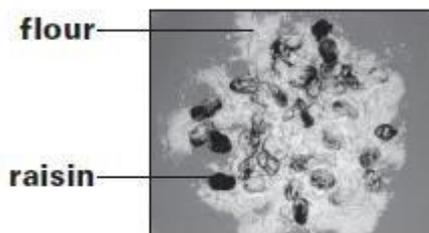


1. ....
2. ....

1 mark

**In the kitchen**

- (a) Sophie and her dad are cooking in the kitchen. Sophie spills some flour onto some raisins.



Tick **ONE** box to show the equipment Sophie could use to separate the flour from the raisins quickly.




**Wooden spoon**




**Sieve**




**Weighing scales**




**Filter**

1 mark

- (b) Sophie thinks of some things you can do in the kitchen. The activities cause the materials to change.

Complete the table by writing **solid**, **liquid** or **gas** in each box to show how the materials change. One box has been done for you.



Activity	Before	After
Baking a cake	liquid	
Melting butter		
Making ice cubes		

1 mark

- (c) Write **yes** or **no** in each row of the table to show if the activity causes a **reversible** change.



Activity	Does the activity cause a reversible change? Yes or no?
Baking a cake	
Frying eggs	
Dissolving sugar	
Burning candles on a birthday cake	
Making ice cubes	

2 marks

- (d) Sophie's dad heats water in a saucepan.  
The water does **not** boil.  
The level of the water in the pan goes down as the water is heated.

Name the scientific process that causes the level of the water to go down as it is heated.

 .....

1 mark

- (e) There is a window near the pan of hot water.  
Sophie notices condensation is forming on the inside of the window.

Why does condensation form on the window? Tick **ONE** box.

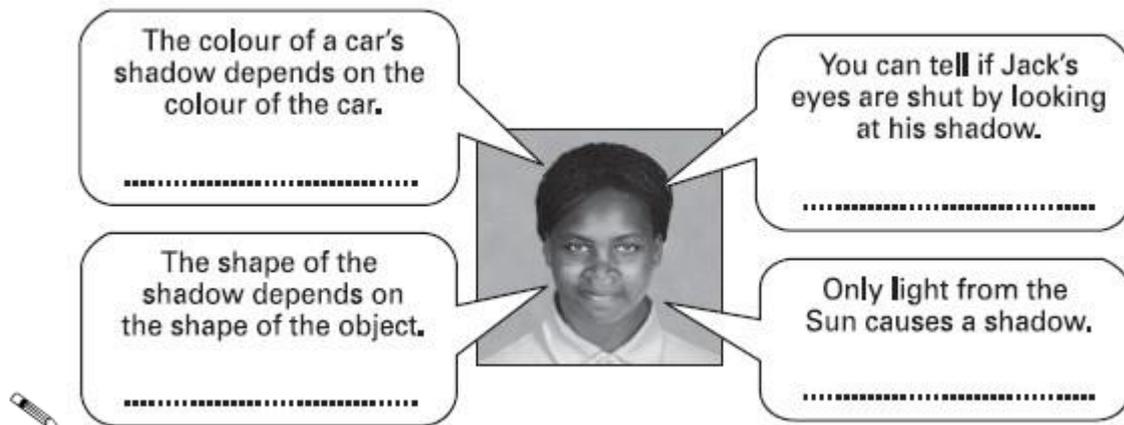
 Condensation forms because the window is...

smooth.  transparent.  cold.  hard.

1 mark

Susie has some ideas about shadows.

Write **true** or **false** under each idea about shadows.



The colour of a car's shadow depends on the colour of the car.  
.....

You can tell if Jack's eyes are shut by looking at his shadow.  
.....

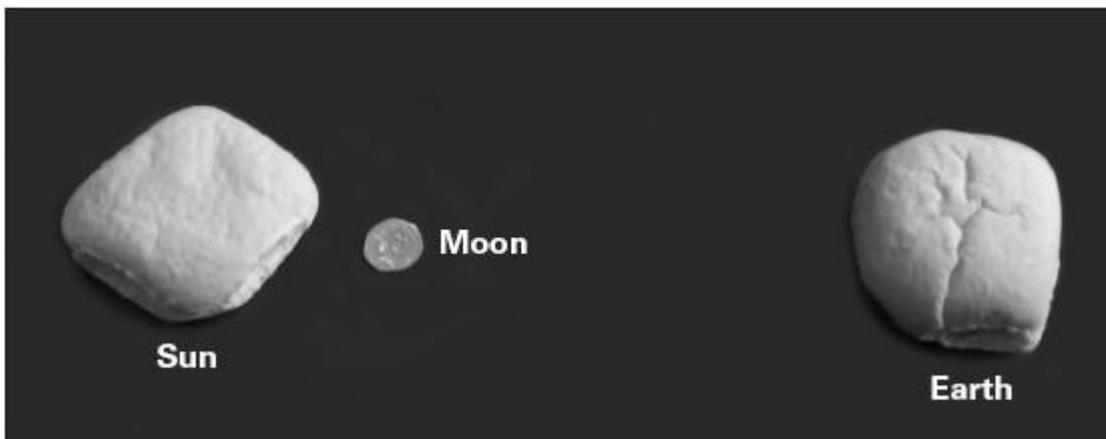
The shape of the shadow depends on the shape of the object.  
.....

Only light from the Sun causes a shadow.  
.....

2 marks

**The Sun**

- (a) George makes a model of the Sun, Earth and Moon.  
He uses two bread rolls and a 50p coin.



Tick **THREE** boxes to show some changes that would make George's model more accurate.



The Sun should be bigger.

The Moon should be the same size as the Earth.

The Sun should be a sphere.

The Moon should be an oval.

The Sun should orbit the Earth.

The Moon should be closer to the Earth.

2 marks

(b) The Sun appears to move across the sky each day.

What movement in space makes the Sun appear to move across the sky each day?



.....  
.....

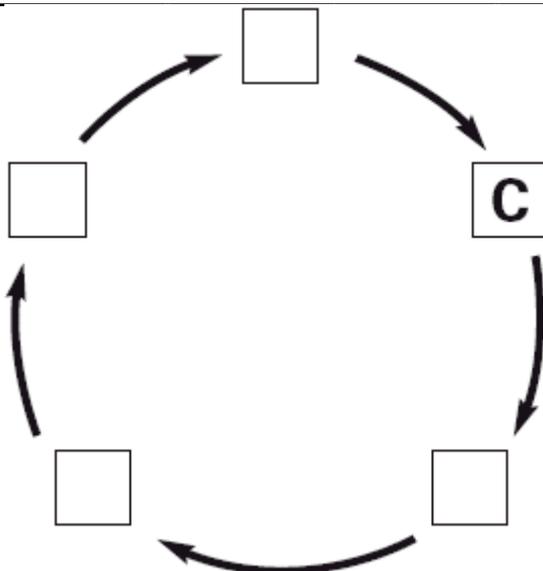
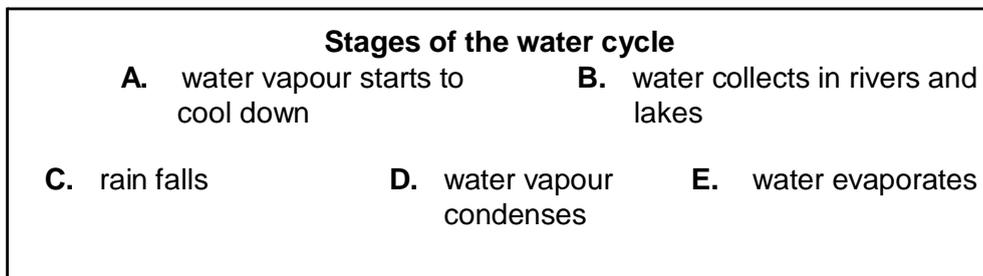
1 mark

### Watering plants

Rain falling is part of the water cycle.

Write the letters **A–E** on the diagram to show the order of the stages in the water cycle.

One stage is done for you.



2 marks