



**Question One**

a. Copy and complete MRS GREN to show the seven characteristics of living things. Note: Two have already been done for you.

**Movement**                      R.....                      S.....

**Growth**                         R.....                      E.....

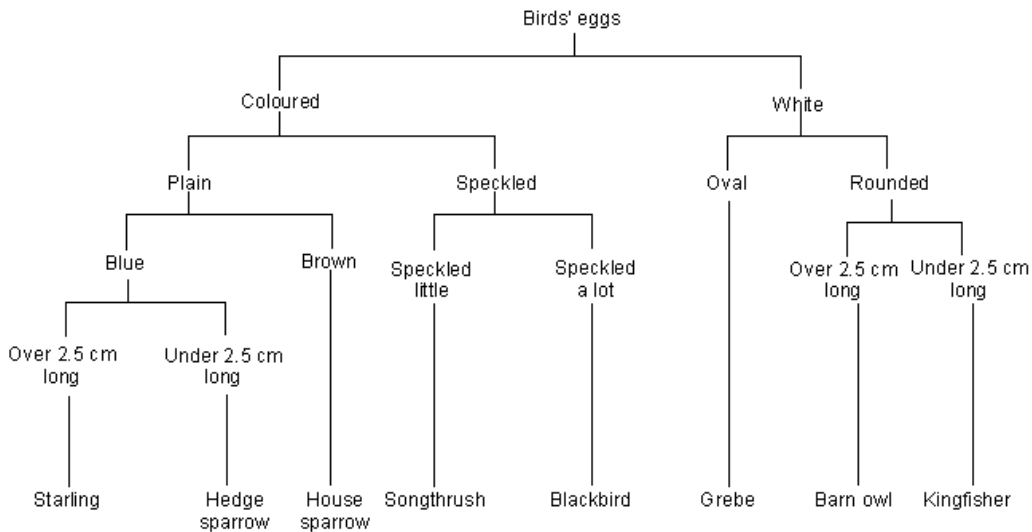
**N.....**

b. Below are a number of common objects. **Circle** each object that is a **non living** object.

seaweed      mushroom      cloud      car      beaker

**Question 2**

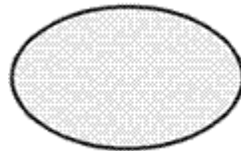
This chart identifies some bird's eggs.



a. How many kinds of birds can be identified using this key? \_\_\_\_\_

b. How many of these birds lay coloured eggs? \_\_\_\_\_

c. Write the name of the bird which lays these eggs: Note: The eggs are drawn to scale.



A white egg is laid by a \_\_\_\_\_

A light blue egg is laid by a \_\_\_\_\_

Which bird lays a plain brown egg?

\_\_\_\_\_

### **Question 3**

In the space provided below, draw the correct symbol that is used to represent the following equipment.

a. Measuring cylinder

b. Conical flask

c. Clamp stand

d. Boiling tube

e. Beaker

f. Evaporating basin

a)	b)
c)	d)
e)	f)

**Question 4**

Draw a labelled scientific diagram to show how you would evaporate a beaker of salt water using a Bunsen burner. (Hint using an evaporating basin)

**Question 5**

Complete the table below to clearly show the differences between the Blue and Yellow flame of the Bunsen burner.

	Blue Flame	Yellow Flame
Position of Air hole: Open or Closed?		
Does the flame make a noise? <i>Yes or No?</i>		

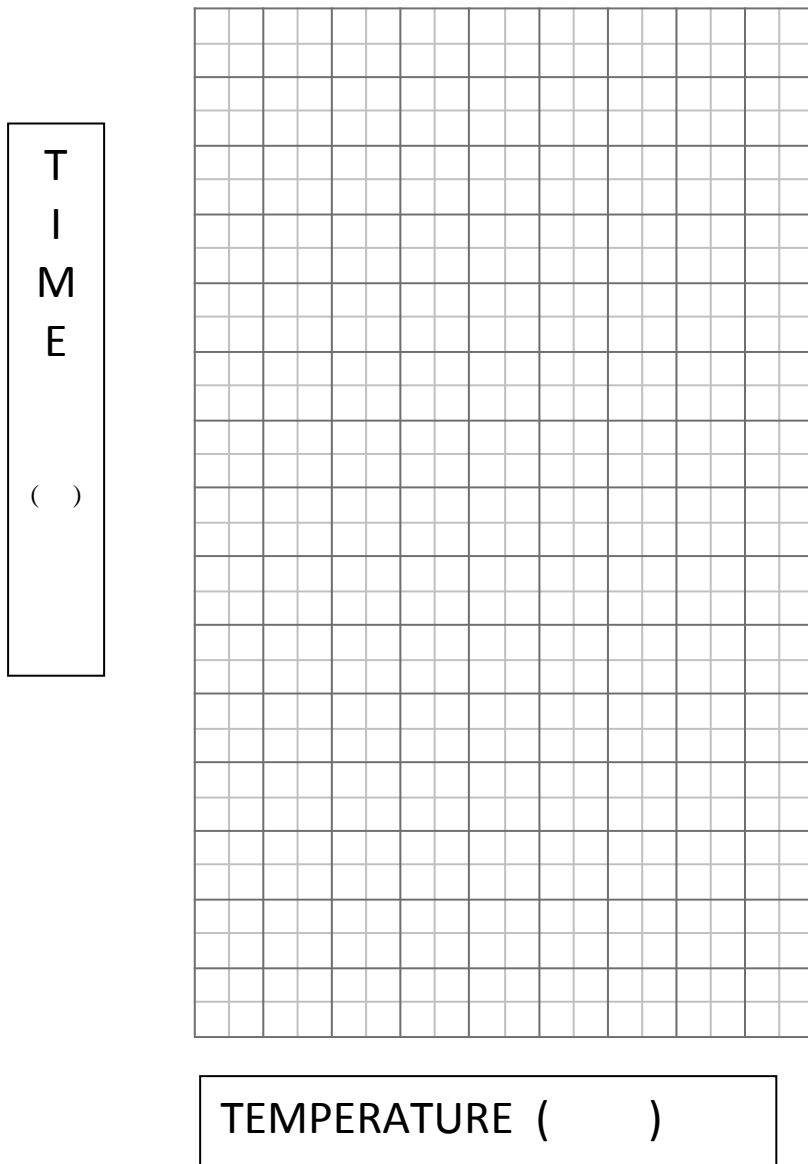
### Question 6

Six students each measured how long it takes a tablet to dissolve in water at different temperatures.

Temperature of water / °C	Dissolving time / s
20	27
25	24
30	22
35	20
40	18
45	16

On the graph paper below, draw a line graph for the data above.

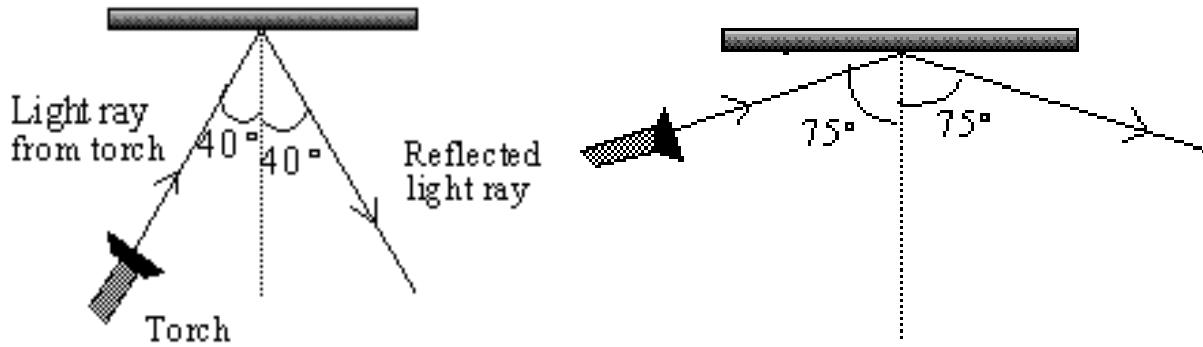
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### Question 7

Look at the diagrams below.

- a. Use them to write a sentence, which describes the relationship between the ray from the torch and the reflected ray.



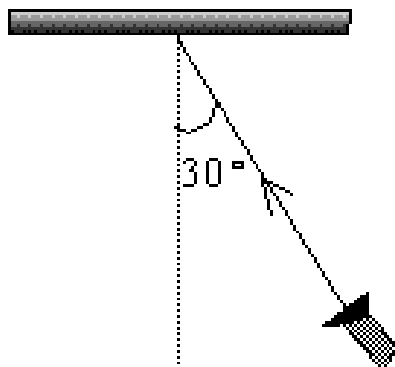
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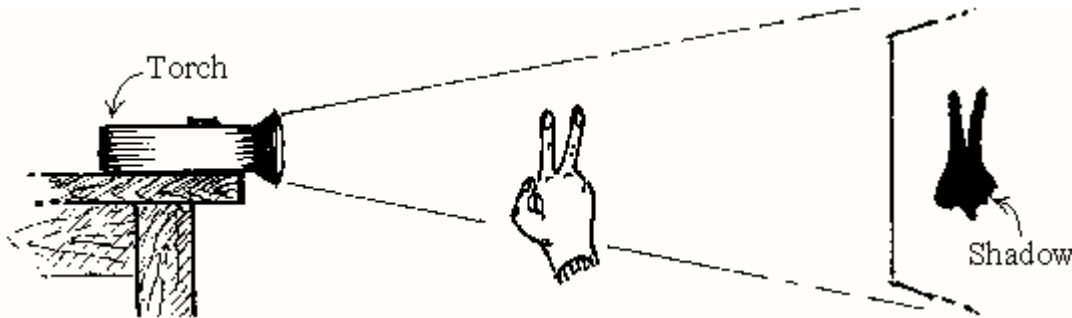
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- b. Complete the diagram below by drawing the reflected ray and labelling the angle of reflection.



### Question 8

Judy is making a small shadow of a rabbit's head on a white wall by using the fingers and thumb of her hand.



Why did Judy use a white wall instead of a brown wall?

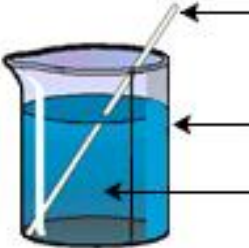
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### Question 9

Sugar dissolves easily in water. Jane set up the following experiment to see which type of sugar dissolves best.

<p>The sugars tested were:</p> <ul style="list-style-type: none"><li>• White sugar</li><li>• Brown sugar</li><li>• Icing sugar</li><li>• Castor sugar</li></ul>	 <p>Stirring rod</p> <p>beaker</p> <p>water</p>
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Spoonfuls of sugar were added to the water one at a time. The solution was stirred until no more sugar dissolved. The number of spoonfuls was counted.

Fresh water was used for each test.

- a. For this to be a fair test which of the following would need to be kept the same? (circle yes or no on the next page)

	<b>Kept the same?</b> <i>Circle yes or below</i>
The temperature of the water.	Yes / No
The type (brand) of sugar.	Yes / No
The volume of water.	Yes / No
The size of the beaker.	Yes / No
The amount of stirring.	Yes / No
The size of the spoon.	Yes / No

b. Mark's father liked sweet tea. He stirred three heaped teaspoons of sugar into a cup that was almost overflowing. But, adding the sugar didn't make the tea spill over into the saucer. What happened to the sugar? **Circle** the correct letter below.

- A. The hot tea caused it to evaporate
- B. It settled on the bottom of the cup.
- C. It melted and became liquid.
- D. It dissolved in the hot liquid.

c. Whilst Mark was making his father his cup of tea he remembered that his teacher had taught him the meaning of the words **solute** and **solvent**.

Give the name of the solute and the solvent involved in the making of the cup of tea.

Solute

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Solvent

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**Now check your answers.**