

Topic 6 The Titanic

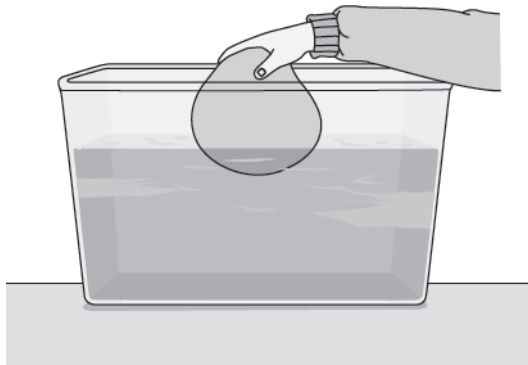
Total marks /27

Question 1

A ball of plasticine sinks when placed in water.
Describe how to change the shape so that it will float.

1 mark

Question 2

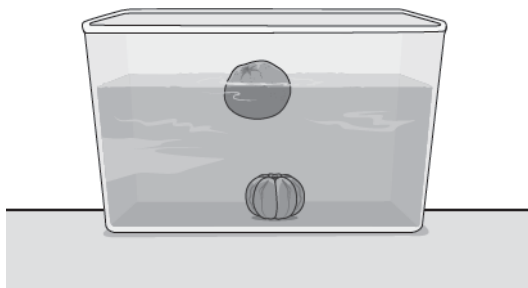


Describe 2 things that happen when the inflated balloon is pushed into the water.

- a) _____
- b) _____

2 marks

Question 3



a) Explain why the unpeeled satsuma is floating.

b) Explain why the peeled satsuma has sunk.

1 mark

1 mark

Question 4

Explain why icebergs are dangerous to shipping.

2 marks

Question 5

a) Explain what the word **hypothermia** means.

1 mark

b) Explain what a thermal insulator is.

1 mark

Question 6

Class 6 were investigating thermal insulators.

The picture shows how they set up their investigation.

Answer the following.



a) Write down 2 things that they did to keep their test fair.

1 mark

b) Draw the table for their results. Make sure you put the headings in.

2 marks

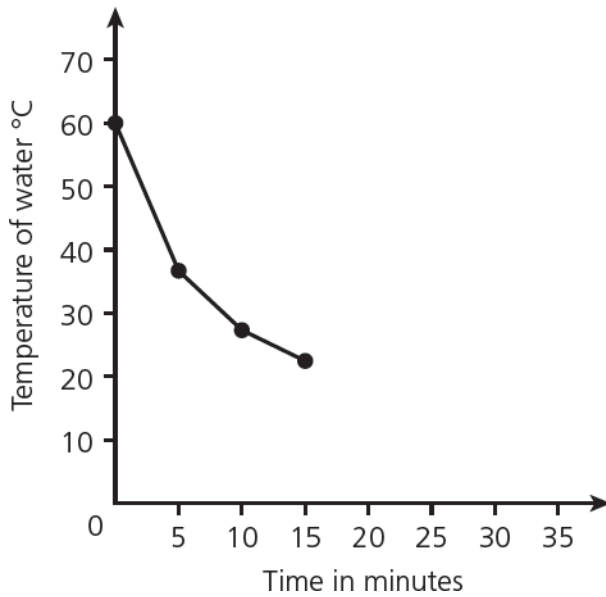
- c) When the children finished collecting their data, what kind of graph would they draw? A bar graph or a line graph. How do you know?

Question 7

Class 6 measured the temperature of water over time. The temperature in the classroom was 20°C.

Use this line graph to answer these questions.

- a) Write a title for this graph.



- b) What temperature was the water after 15 minutes? _____
- c) What was the temperature of the water at the beginning of this activity? _____
- d) If the class continued to measure the temperature of the water after 15 minutes, draw a line on the graph to show what would happen.

1 mark

1 mark

1 mark

1 mark

1 mark

Question 8

Here is the data that Class 6 collected when they tested thermal insulators in Question 6.

Material around the bottle	Temperature of the water (°C)				
	0 minutes	5 minutes	10 minutes	15 minutes	20 minutes
Newspaper	75	69	55	43	28
Foil	70	68	69	55	44
Bubble wrap	76	72	66	60	55

a) Look at the data. Which data is an anomaly that does not follow the pattern of the rest of the data?

1 mark

b) What should the group do if the data is incorrect?

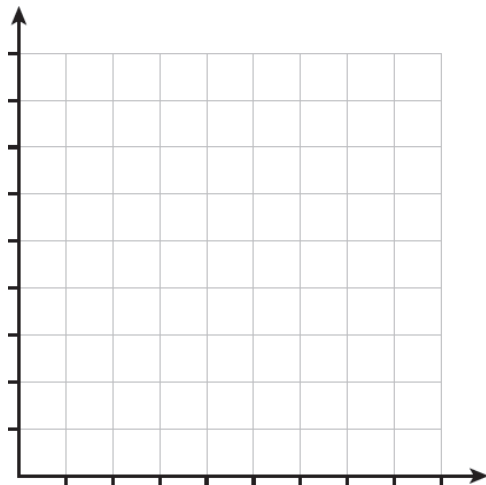
1 mark

c) What do you think the number should be?

1 mark

Question 9

Use the data from Question 8 to draw a line graph showing all three materials.



Question 10

Use the graph in Question 9 to answer these questions.

a) Which material was the best thermal insulator? _____

1 mark

b) Which material was the worst thermal insulator? _____

1 mark