Science Practice 7

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 ☐

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		

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	

LIVEWORKSHEETS

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. ☐

3 Animal heart rates

Some children found out about the heart rate of some fully grown animals.

Fully grown animal (drawings not to scale)	Average mass of animal (kg)	Average heart rate (beats per minute)
elephant 	3000	35
human 	68	70
cat 	7	130
rabbit 	4	205
squirrel 	0.5	400

Use the table to answer the next three questions.

(i) Which fully grown animal has the fastest average heart rate?

.....

(ii) What is the average mass of a fully grown cat?

..... kg

This dog has a mass of 30 kg.



Predict the heart rate of this dog.
Use the table to help you.

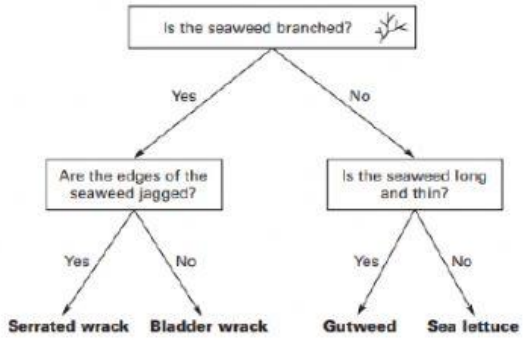
..... beats per minute

LIVEWORKSHEETS

4 Seaweed and trees

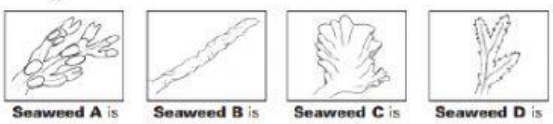
(a) Maria found different types of seaweed on the beach.

Her teacher has a key to identify the seaweeds.



Use the key to identify the different seaweeds below.

Seaweed A has been done for you.



Seaweed A is Bladder wrack

Seaweed B is .....

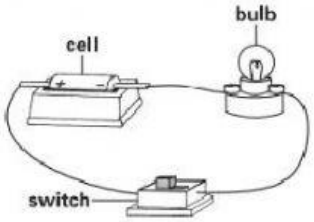
Seaweed C is .....

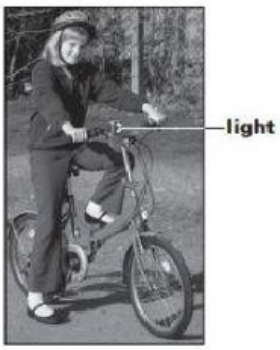
Seaweed D is .....

5 Road safety

Julia has a bike with a light.

The picture below shows the circuit in Julia's light.





What should Julia add to her circuit to make the light brighter?

Julia should add .....

LIVEWORKSHEETS

Aziz is comparing the size of straight arms and bent arms.
He measures around the top of his friend's arm when it is straight and when it is bent.



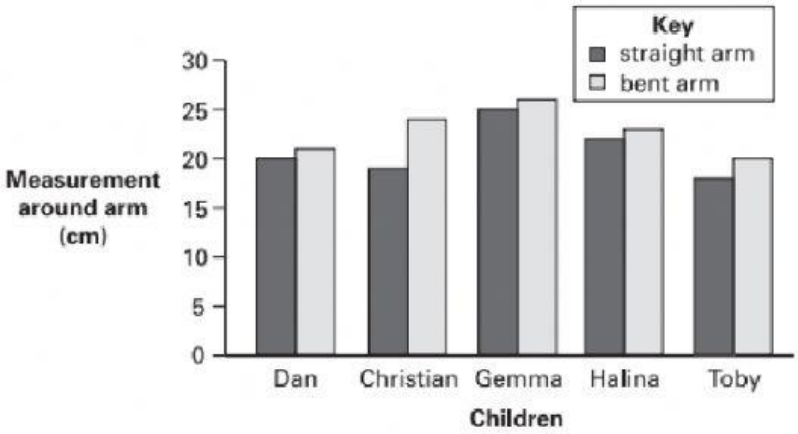


He repeats his investigation with other friends.
Aziz makes sure his investigation is fair.

Write **true** or **false** next to each statement to show if it would make Aziz's investigation fair.

To make his investigation fair, Aziz must...	**True** or **false**?
make sure everyone rolls up their sleeves.	.....
measure the arms of lots of children.	.....
measure around the arms in the same place.	.....

Here are Aziz's results:



Look at the graph.

LIVEWORKSHEETS

7 Drinking chocolate

Class 6J want to find out which material is best at keeping drinking chocolate hot.

The class have four identical plastic cups.
They wrap each one in a different material.
They put the same amount of chocolate drink in each cup and put lids on.



Tick **ONE** box to show what property the material should have if it is best at keeping the drink hot.

The material should be...

strong. ☐ a conductor. ☐

hard. ☐ an insulator. ☐

The class measure the temperature of the drinking chocolate in each cup every five minutes.

They record their results in a table.

One result looks incorrect.

Material around the cup	Temperature of drinking chocolate after... (°C)				
	0 minutes	5 minutes	10 minutes	15 minutes	20 minutes
Newspaper	70	65	53	40	27
Foil	70	67	58	54	45
Food wrap	70	63	25	45	30
Bubble wrap	70	69	65	58	50

Which result in the table should they check again?
Write the number.

LIVEWORKSHEETS