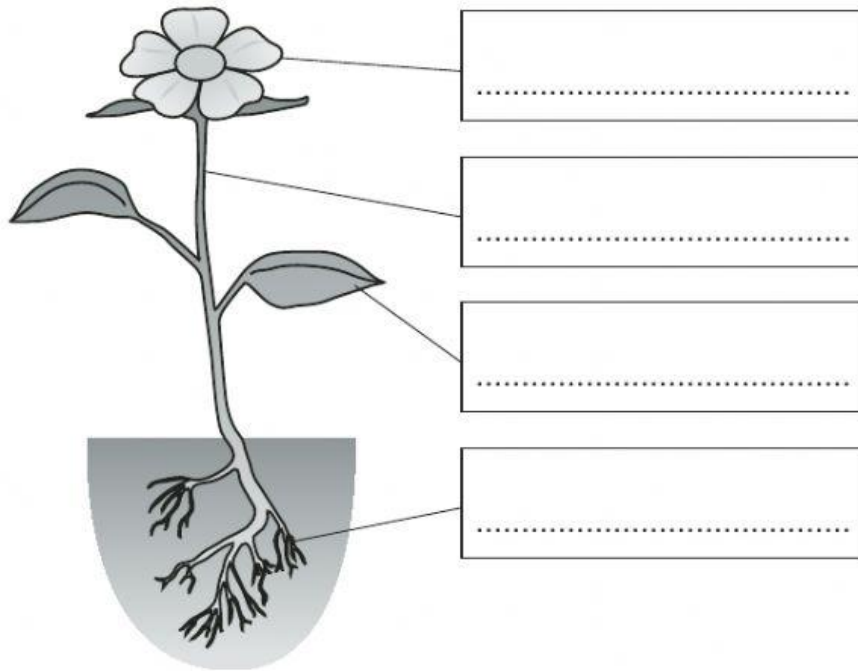


1 (a) The picture shows a plant.



Complete the **four** labels on the diagram.

[1]

(b) Complete the sentence.

Water is taken in through the and transported
through the

[2]

2 The table shows information about two substances.

substance	property	
	does it dissolve in water?	does it dissolve in ethanol?
salt	yes	no
sugar	yes	yes

Blessy wants to separate a mixture of salt and sugar.

(a) She tries to use a magnet to separate the substances.

This does **not** work.

Explain why using a magnet does **not** work.

.....
 [1]

(b) Blessy adds water to some of the mixture.

She stirs the mixture and then filters it.

Explain why this does **not** separate the mixture of salt and sugar.

.....
 [1]

(c) Blessy separates the remaining mixture of salt and sugar.

Describe what she does.

.....

 [2]

3 Carlos investigates forces.

(a) Which apparatus does he use to measure force?

..... [1]

(b) He writes his results in a table.

type of force	force
pull	4.8
push	6.1
twist	5.3

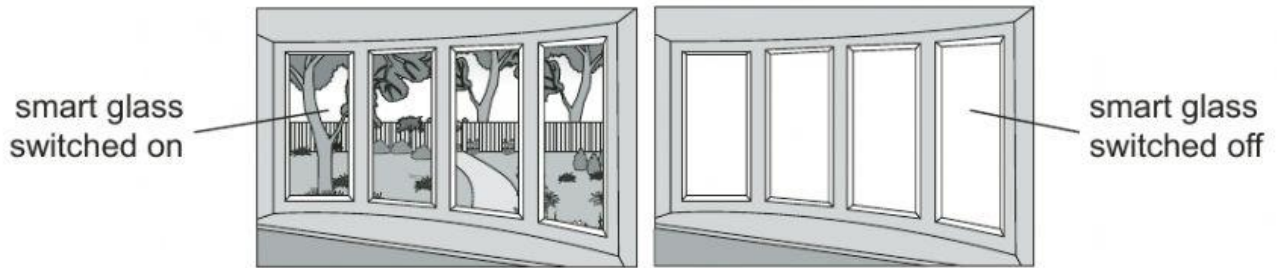
Carlos has **not** put the unit for force in the table.

What is the unit for force?

..... [1]

4 Hassan has smart glass in his windows.

He can switch the smart glass on and off.



Describe what happens to the smart glass in the two pictures.

When the smart glass is switched **on** Hassan can see through it because it is

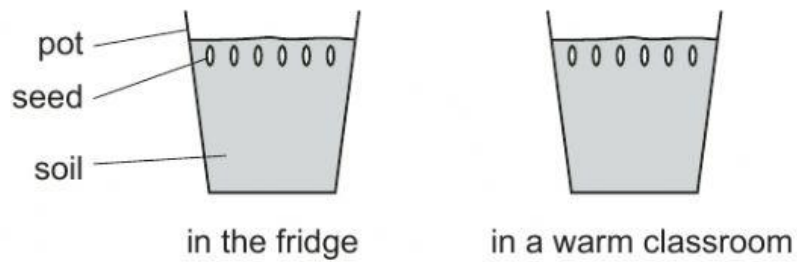
.....

When the smart glass is switched **off** Hassan **cannot** see through it because it is

.....

[2]

5 Chen and Aiko investigate how seeds germinate.



(a) Give **one** reason why this is a fair test.

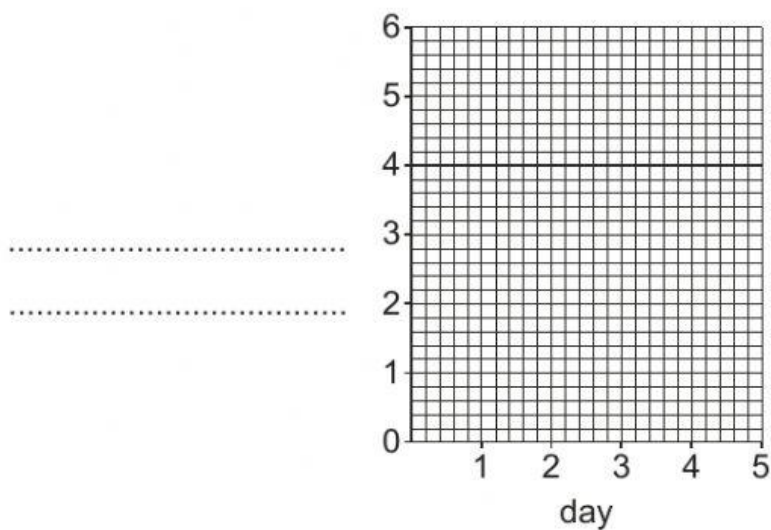
[1]

(b) Here are the results for the pot in the warm classroom.

day	number of seedlings in the warm classroom pot
1	0
2	1
3	2
4	4

Draw a **line graph** of the results.

Label the y-axis.



[3]

(c) Here are the results for both pots.

Complete the table to predict the number of seedlings on day 5.

day	number of seedlings in the warm classroom pot	number of seedlings in the fridge pot
1	0	0
2	1	0
3	2	1
4	4	2
5		

[2]

(d) Use Chen and Aiko's results to write a conclusion for their investigation.

.....

[1]