testbase

Year 7 Science February Mock Exam Foundation

Name: _____

Class: _____

Date: _____

Time: **60 minutes**

Marks: **63 marks**

Comments:

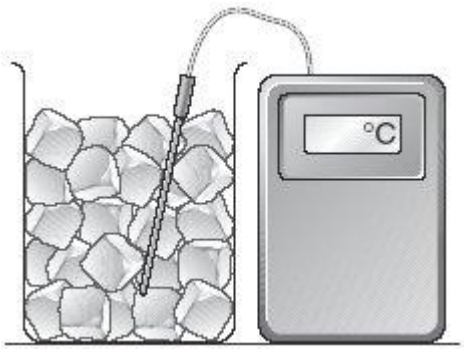
Q1.

(a) Draw a line from each change of state to the correct name.
Draw only **four** lines.

change of state	name
solid to liquid	evaporating
liquid to gas	melting
gas to liquid	condensing
liquid to solid	freezing

3 marks

(b) Kate made some ice cubes from pure water.
She used a sensor to measure the temperature of the ice.



What temperature will the sensor show when the ice is melting?

..... °C

1 mark

(c) Kate made some more ice cubes from salt solutions. She used a different mass of salt in each ice cube.

The table shows the temperature at which the ice cubes melted.

mass of salt in each ice cube (g)	temperature ice cube melted (°C)
5	−4
10	−8
15	−11
20	−15

Look at the table above.
As the mass of salt increased, what happened to the temperature at which the ice cube melted?

.....

1 mark

(d) In very cold weather a mixture of salt and sand is spread on roads.

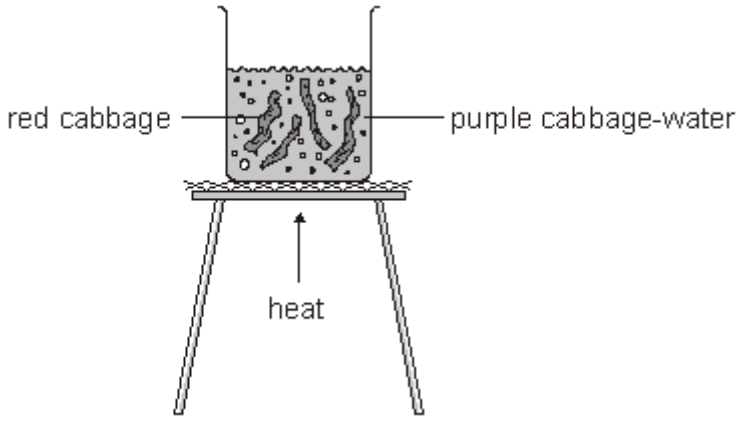
Why are salt **and** sand used?
Tick the **two** correct boxes.

Salt makes the roads white.	☐	Sand dissolves in water.	☐
Salt makes water freeze.	☐	Sand increases friction between car tyres and the road.	☐
Salt makes ice melt.	☐	Sand makes water freeze.	☐

2 marks
maximum 7 marks

Q2.

Sharna boiled some red cabbage in water. The cabbage-water turned purple.



(a) (i) Sharna separated pieces of cabbage from the cabbage-water.

Which method did she use?
Tick the correct box.

chromatography	☐	filtration	☐
condensation	☐	freezing	☐

1 mark

(ii) Sharna wanted to find out if the purple cabbage-water contained more than one **coloured** substance.

Which method did she use?
Tick the correct box.

chromatography	☐	filtration	☐
condensation	☐	freezing	☐

1 mark

(b) Sharna mixed the purple cabbage-water with some other liquids.
She wrote the colours of the mixtures in a table as shown below.

	colour of cabbage-water mixed with liquid	Is the liquid acidic, alkaline or neutral?
liquid 1	red	acidic
liquid 2	blue	alkaline
liquid 3	purple	neutral

Use the information in the table to answer parts (i) and (ii) below.

(i) Sharna mixed cabbage-water with colourless washing-up liquid.
The mixture turned **blue.**

What does this tell you about the washing-up liquid?

.....

1 mark

(ii) Sharna then mixed cabbage-water with lemon juice.
Lemon juice is **acidic.**

What colour was the mixture?

.....

1 mark

(c) What is the name of a chemical which changes colour when it is mixed with acids or alkalis?
Tick the correct box.

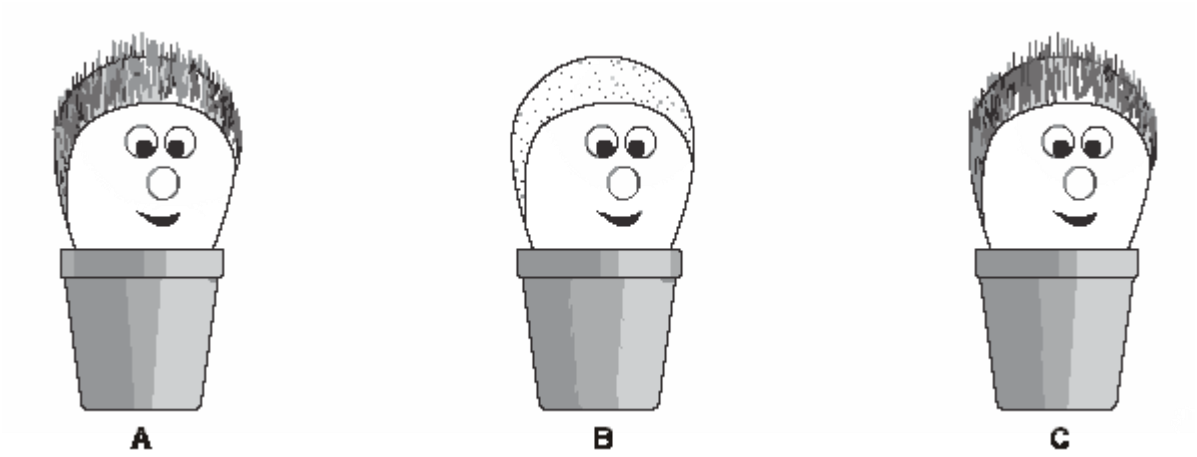
filtrate	☐	indicator	☐
non-metal	☐	solution	☐

1 mark
maximum 5 marks

Q3.

Nadine mixed grass seeds with sand.
She put the mixture into three mesh bags to make three model heads.
She soaked two of the bags in water.

(a) The drawings below show the model heads after one week.



(i) Which **two** model heads did Nadine soak in water?
Give the letters.

..... and .....

How can you tell this from the drawings?

.....

.....

1 mark

(ii) Nadine watered both of these models for two weeks.
She watered one more often than the other.

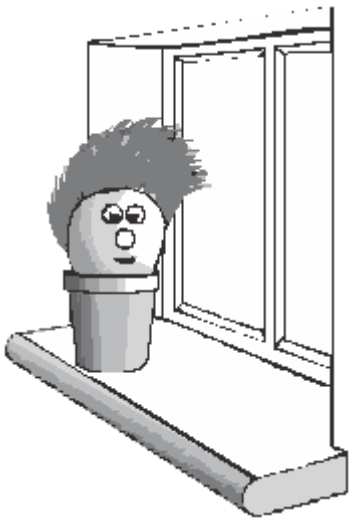
How would the model that was watered more often look different from the other one?

.....

.....

1 mark

(b) Nadine put one of the watered models near a window.

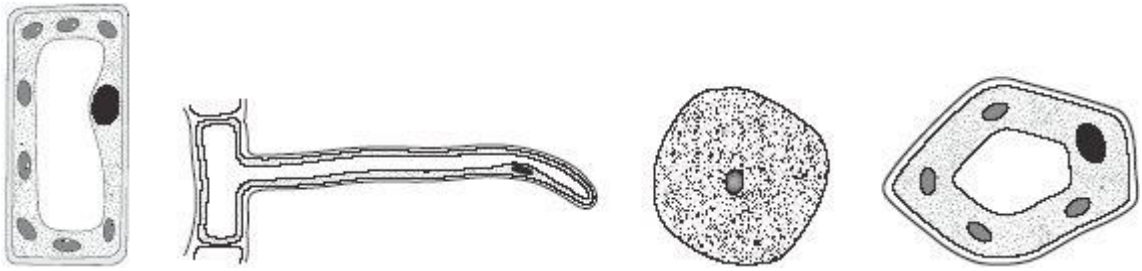


Why did the grass grow towards the window?

.....

1 mark

(c) (i) Grass plants have root hairs. Which diagram shows a root hair cell?
Tick the correct box.



A ☐ B ☐ C ☐ D ☐

1 mark

(ii) Fill the gaps in the sentence below.

Root hairs take in ..... and

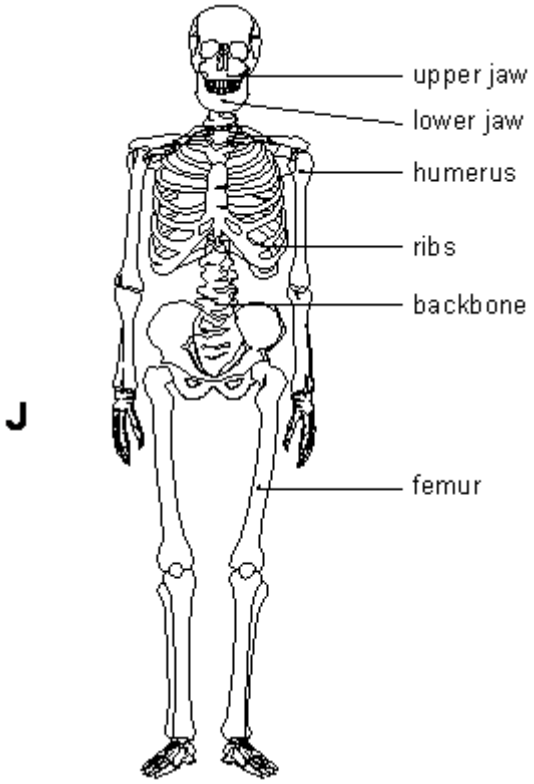
1 mark

..... from the soil.

1 mark
maximum 6 marks

Q4.

The diagram below shows the human skeleton.



(a) (i) Draw a line from the letter **J** to **one** joint in the leg.

1 mark

(ii) Why do we need joints in our skeleton?

.....

.....

1 mark

(b) (i) Which part of our skeleton, labelled in the diagram, moves so that we can breathe?

.....

1 mark

(ii) Which part of our skeleton, labelled in the diagram, moves so that we can chew food?

.....

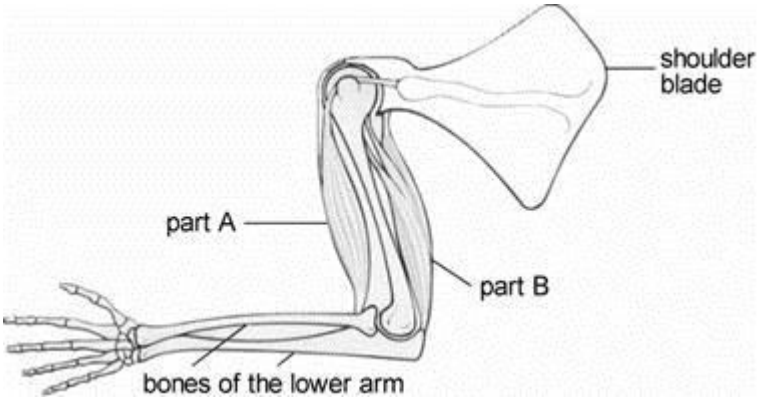
1 mark

(c) Which **one** of the following is needed in the diet for strong bones and teeth? Tick the correct box.

aluminium	☐	copper	☐
calcium	☐	iron	☐

1 mark

(d) The diagram below shows part of the arm.



(i) Parts A and B are attached to bones. What name is given to parts of the body like parts A and B?

.....

1 mark

(ii) Part A gets shorter. In which direction does the lower arm move?

.....

1 mark

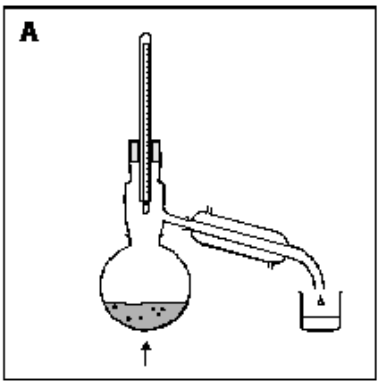
Maximum 7 marks

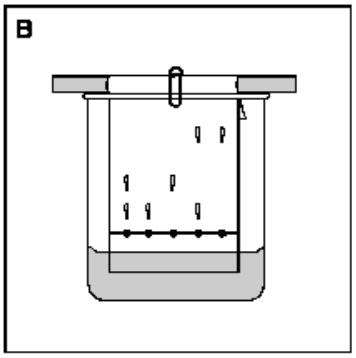
Q5.

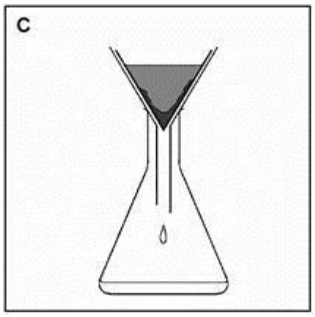
Diagrams A, B and C show three pieces of apparatus for separating substances.

(a) Draw a line from each apparatus to the name of the method of separation. Draw only three lines.

diagram of apparatus **method of separation**







chromatography

distillation

filtration

crystallisation

3 marks

(b) Debbie has a mixture of sand and salt water.
Look at the diagrams in part (a).

(i) Which apparatus would Debbie use to separate the sand from the salt water?
Give the correct letter.

.....

1 mark

(ii) Which apparatus would she use to separate pure water from the salt water?
Give the correct letter.

.....

1 mark
Maximum 5 marks

Q6.

Two groups of pupils investigated the factors affecting the time taken for an indigestion tablet to dissolve in 100 cm^3 of water.

Group 1 recorded their results in the table below.

results of group 1

tablet	time taken to dissolve (s)
whole tablet	34
broken tablet	28
finely crushed tablet	22

(a) What factor did group 1 change as they carried out their investigation?

.....

1 mark

(b) Before the investigation, group 1 made a prediction.
They found this prediction was supported by the results in the table.

What prediction did group 1 make?

.....

.....

1 mark

(c) Group 2 investigated how the temperature of the water affects the time taken for a whole tablet to dissolve.

Here are their results.

results of group 2

temperature of water (ºC)	time taken to dissolve (s)
65	24
40	35
15	90
5	100

What factor did group 2 change as they carried out their investigation?

.....

.....

1 mark

(d) What pattern do the results recorded by group 2 show?

.....

.....

1 mark

(e) Look at the results presented by group 1 and group 2.

Both groups used the same type of tablet.

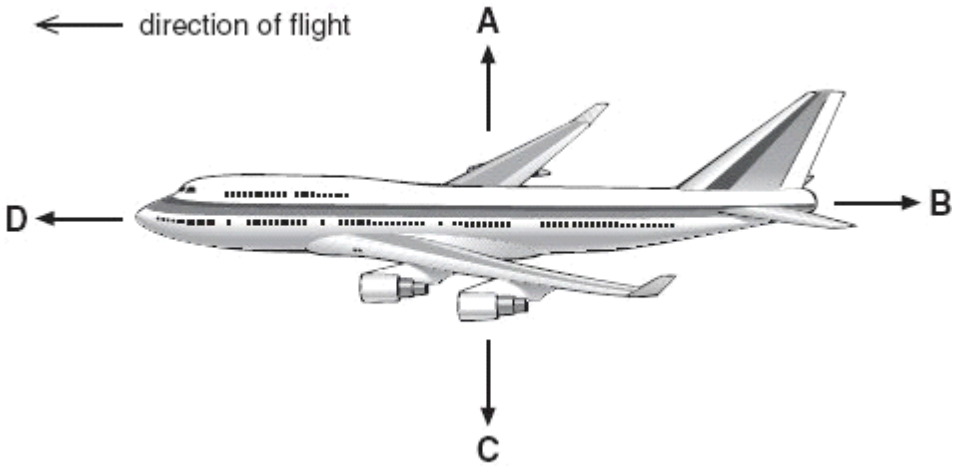
Estimate the temperature of water used by group 1.

.....°C

1 mark
maximum 5 marks

Q7.

The diagram shows four forces acting on a plane in flight.



(a) Which arrow represents air resistance?
Give the letter.

.....

1 mark

(b) (i) When the plane is flying at a constant height, which **two** forces must be balanced?
Give the letters.

..... and .....

1 mark

(ii) When the plane is flying at a constant speed in the direction shown, which **two** forces must be balanced?
Give the letters.

..... and .....

1 mark

(c) (i) Just before take-off, the plane is speeding up along the ground.

Which statement is true?
Tick the correct box.

Force B is zero. ☐

Force B is greater than force D. ☐

Force D is equal to force B. ☐

Force D is greater than force B. ☐

1 mark

(ii) Which statement is true about the plane just as it leaves the ground?
Tick the correct box.

Force C is zero. ☐

Force C is greater than force A. ☐

Force A is equal to force C. ☐

Force A is greater than force C. ☐

1 mark
maximum 5 marks

Q8.

This question is about four chemical elements.

(a) The melting points and boiling points of the four elements are shown in the table.
Complete the table to give the physical state, **solid**, **liquid** or **gas**, of each element at room temperature, 21°C.

element	**melting point in °C**	**boiling point in °C**	**physical state at room temperature, 21°C**
bromine	–7	59	
chlorine	–101	–34	
fluorine	–220	–188	
iodine	114	184	

4 marks

(b) Bromine can be a solid, a liquid or a gas depending on the temperature.
In which physical state will 10 g of bromine store the most thermal energy?

.....

1 mark

(c) Is bromine a **solid**, a **liquid** or a **gas** when the arrangement of particles is:

(i) far apart and random? .....

1 mark

(ii) close together but random? .....

1 mark

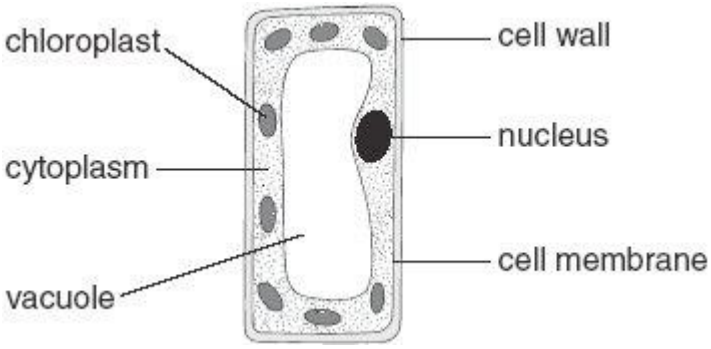
(iii) close together in a regular pattern? .....

1 mark

Maximum 8 marks

Q9.

The diagram below shows a plant cell.



(a) In which part of a plant would you find this type of cell?

.....

1 mark

(b) (i) Give the function of the nucleus.

.....

.....

1 mark

(ii) Give the function of the chloroplasts.

.....

.....

1 mark

(iii) Give the function of the cell wall.

.....

.....

1 mark

(c) Give the names of **two** labelled parts that are **not** present in animal cells.

1. .....

2. .....

2 marks

(d) Tick **one** box in each row to show whether the statement is true for photosynthesis **or** for respiration.

statement	photosynthesis	respiration
carbon dioxide is produced		
light is needed		
it occurs in plants and animals		
oxygen is produced		

2 marks
maximum 8 marks

Q10.

Hydrochloric acid is a strong acid.

(a) Winston used universal indicator solution to find the pH of some hydrochloric acid.

(i) Suggest the **colour** of the mixture of universal indicator solution and the hydrochloric acid.

.....

1 mark

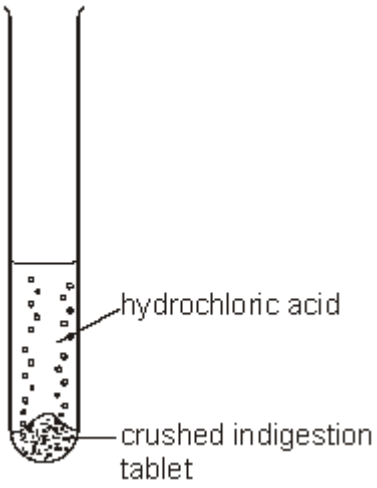
(ii) Suggest the **pH** of the hydrochloric acid.

.....

1 mark

(b) Indigestion can be caused when too much hydrochloric acid is produced in the stomach.
Magnesium carbonate can be used to treat indigestion.

Winston crushed some indigestion tablets containing magnesium carbonate. He added them to hydrochloric acid in a test-tube. The mixture fizzed.



The word equation for the reaction is shown below.

magnesium carbonate + hydrochloric acid → magnesium chloride + carbon dioxide + water

(i) Use the word equation to explain why the mixture fizzed when the reaction took place.

.....

.....

1 mark

(ii) Winston continued to add crushed tablets to the acid until the mixture stopped fizzing.
Why did the fizzing stop?

.....

.....

1 mark

(c) When magnesium carbonate reacts with hydrochloric acid, magnesium chloride is formed.

Which **two** words describe magnesium chloride?
Tick the **two** correct boxes.

a compound	☐	a mixture	☐
an element	☐	a salt	☐
a metal	☐	a solvent	☐

2 marks

(d) It is important that the hydrochloric acid in the stomach is **not** completely neutralised by indigestion tablets.

Why is hydrochloric acid needed in the stomach?

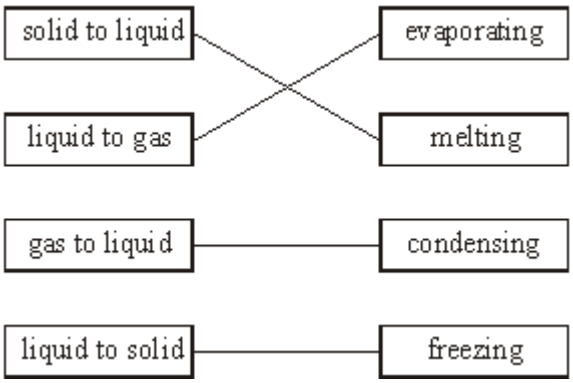
.....

.....

1 mark
maximum 7 marks

Q1.

(a) •



*award three marks for **all four** correct lines*
*award two marks for any **three** correct lines*
*award one mark for any **two** correct lines*
if more than one line is drawn from any change of state, do not credit that change of state

3 (L3)

(b) • 0 °*C*

accept 'zero'
*do **not** accept 'nothing'*

1 (L4)

(c) • it decreased

accept 'it got colder'
'it dropped to below 0°C' is insufficient
any references to time are insufficient

1 (L3)

(d) • Sand increases friction between car tyres and the road. ✓

• Salt makes ice melt. ✓

if more than two boxes are ticked, deduct a mark for each incorrect box
minimum of zero

2 (L4)

[7]

Q2.

(a) (i) filtration ✓

if more than one box is ticked, award no mark

1 (L3)

(ii) chromatography ✓

if more than one box is ticked, award no mark

1 (L3)

(b) (i) it is alkaline

accept 'alkali'

1 (L3)

(ii) red

1 (L3)

(c) indicator ✓

if more than one box is ticked, award no mark

1 (L4)

[5]

Q3.

(a) (i) • A and C

answers may be in either order

***both** the letters and the reason are required for the mark*
'A and C are the same' is insufficient

any **one** from

- grass has germinated **or** grown

  accept 'A and C have hair'
  accept 'something has grown in A and C'
  accept 'they have hair'
  *accept 'they have longer **or** more grass'*

- seeds did not germinate **or** grow in B

  accept 'B has no hair'

  'seeds need water to grow' is insufficient

1 (L3)

(ii) any **one** from

- it would have longer grass

  *accept 'it had more grass **or** more hair'*

- the grass would have grown more

  *accept 'it grew more **or** faster'*
  accept 'it would have grown less because it was over-watered'

  'it would be greener' is insufficient
  'it would be healthier' is insufficient

1 (L4)

(b) any **one** from

- it grew towards the light
- that is where the light is coming from

  accept 'it grew towards the Sun'
  *accept 'to get light **or** sunlight'*
  *accept 'plants **or** grass need light'*
  accept 'to get more Sun'

  'because of the sunlight' is insufficient

  'to get more heat' is insufficient

1 (L3)

(c) (i) • B ✓

if more than one box is ticked, award no mark

1 (L4)

(ii) any **two** from

- water

  *accept 'moisture' **or** 'dampness'*

- oxygen

- minerals

  accept a named mineral
  *accept 'nutrients' **or** 'salts'*
  accept, for two marks, two named minerals such as 'nitrates' and 'phosphates'
  *do **not** accept 'plant food' **or** 'food' **or** 'nutrition'*

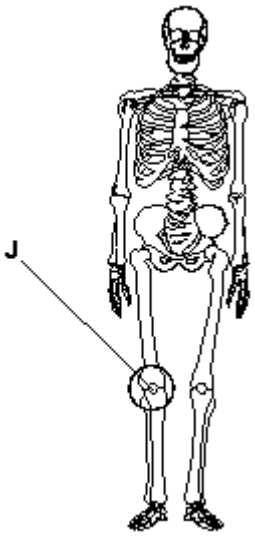
2 (L4)

[6]

Q4.

(a) (i) a line drawn from the letter **J** to any joint in a leg

the mark may be awarded if lines are drawn to more than one joint in the leg



accept a line to a knee, ending within the limits shown
accept a line to a hip or ankle or any joint in the foot provided that it ends on the line between two bones
*do **not** accept a letter **J** written over any joint*

1 (L3)

(ii) any **one** from

- so that we can bend

- so that we can move

  accept 'so that we can walk'
  *do **not** accept 'so that the bones can bend'*

1 (L3)

(b) (i) ribs

1 (L4)

(ii) lower jaw

*do **not** accept 'jaw' **or** 'upper jaw'*

1 (L3)

(c) calcium ✓

if more than one box is ticked, award no mark

1 (L4)

(d) (i) muscles

accept 'biceps and triceps'

***or** 'muscles and tendons'*

*do **not** accept 'muscles and ligaments'*

1 (L4)

(ii) up

accept 'it moves up'

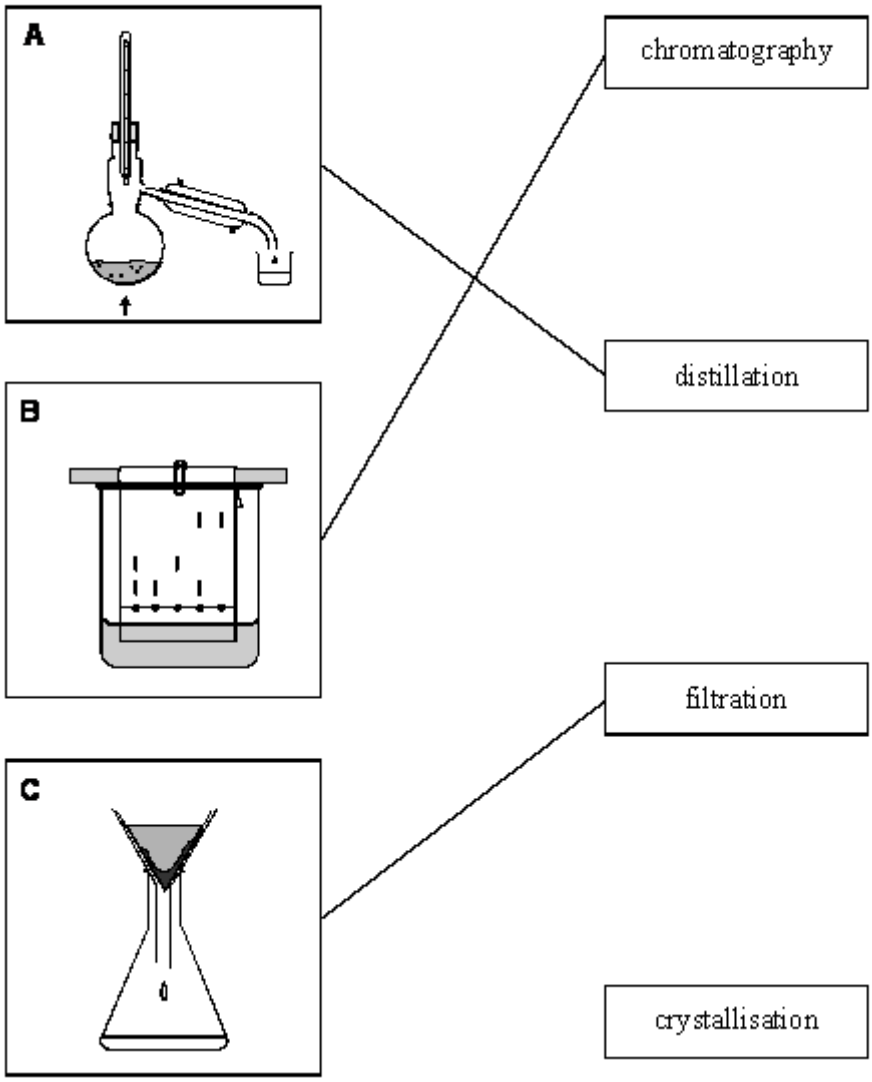
*do **not** accept 'it bends'*

1 (L4)

[7]

Q5.

(a)



if more than one line is drawn from a diagram, award no mark for that diagram

3 (L4)

(b) (i) C

accept 'filtration'

1 (L3)

(ii) A

accept 'distillation'

1 (L4)

[5]

Q6.

(a) any **one** from

- size of pieces of tablet

  accept 'size of tablet'

  *accept 'whether the tablet is whole **or** crushed'*

- surface area of the tablet

accept 'form of the tablet'
accept 'particle size'
accept 'mass of each piece'
accept 'number of pieces'
*do **not** accept 'mass of tablet'*

1 (L5)

(b) any **one** from

- crushed tablets will dissolve more quickly than whole tablets
- a whole tablet will take longer to dissolve
  accept 'the finer the tablet the quicker it dissolves'
  accept 'the smaller the pieces the faster it dissolves'
- the bigger the surface **or** area the faster it dissolves
  answers must include a comparison
  award a mark for an answer in the past tense if a comparison is included

1 (L5)

(c) temperature of the water
accept 'temperature'

1 (L5)

(d) any **one** from

- the higher the temperature the quicker the tablet dissolves
- the lower the temperature the longer it takes to dissolve
  answers must include a comparison
  'at the lowest temperature it takes a long time to dissolve' is insufficient
  'at the highest temperature it dissolves quickly' is insufficient

1 (L5)

(e) 40
accept a temperature from 38 to 44

1 (L6)

[5]

Q7.

(a) B

1 (L5)

(b) (i) A and C
accept 'lift and weight'
answers may be in either order
***both** letters are required for the mark*

1 (L5)

(ii) D *and* B
accept A and C

answers may be in either order
***both** letters are required for the mark*

1 (L5)

(c) (i) • Force D is greater than force B. ✓

if more than one box is ticked, award no mark

1 (L6)

(ii) • Force A is greater than force C. ✓

if more than one box is ticked, award no mark

1 (L6)

[5]

Q8.

(a)

bromine	liquid
chlorine	gas
fluoride	gas
iodine	solid

4 (L6)

(b) gas

1 (L6)

(c) (i) gas

1 (L6)

(ii) liquid

1 (L6)

(iii) solid

1 (L6)

[8]

Q9.

(a) • leaf

*accept 'stem' **or** 'stalk'*

1 (L5)

(b) (i) • it controls the cell **or** cell's activities

accept 'it tells the cell what to do'
'it is the brain of the cell' is insufficient
*accept 'it contains **or** passes on (genetic) information **or** genes **or** DNA'*

1 (L5)

(ii) any **one** from

• absorbs light **or** Sun's energy

*accept 'traps **or** catches light'*
*do **not** accept 'it attracts light'*

- photosynthesis

  *accept 'it makes food **or** glucose **or** sugar **or** starch **or** carbohydrate'*

  'it produces oxygen' is insufficient

1 (L6)

(iii) any **one** from

- gives the cell its shape

  'it protects the cell' is insufficient

- supports the cell

1 (L6)

(c) any **two** from

- cell wall

  accept 'wall'

- vacuole
- chloroplast

2 (L6)

(d) •

photosynthesis	*respiration*
	✓
✓	
	✓
✓	

*if **all four** answers are correct, award two marks*
*if **two or three** answers are correct, award one mark*
if more than one box is ticked in any row, do not credit that row

2 (L6)

[8]

Q10.

(a) (i) red **or** pink

*accept 'orange' **or** 'yellow'*

1 (L5)

(ii) any number greater than 0 and smaller than 7

accept '0'

1 (L6)

(b) (i) carbon dioxide is gas

*accept 'carbon dioxide **or** a gas is produced'*

1 (L5)

(ii) any **one** from

- no more carbon dioxide **or** gas was produced
- the reaction stopped
- all the hydrochloric acid was used up
  accept 'the acid had been neutralised'
  *do **not** accept 'all the magnesium carbonate was used up'*
- there was an excess of magnesium carbonate **or** carbonate

1 (L6)

(c) a compound ✓

1 (L6)

a salt ✓

if more than two boxes are ticked, deduct one mark for each incorrect tick
minimum mark zero

1 (L6)

(d) any **one** from

- without it digestion would stop **or** slow down
  accept 'to break down food'
- acid is needed for digestion
- the enzymes only work in acid conditions **or** at a low pH
- it is needed to kill bacteria **or** microbes
  *do **not** accept 'germs'*

1 (L6)

[7]

Q2.

A third of all pupils, mostly those at levels 5 and 6, gained the maximum five marks for this question.

Most pupils at levels 5 and 6 selected *filtration* as the correct option for part (ai). Most pupils at level 4 also gained the mark, but 20% chose *chromatography* and 20% chose *condensation*. Answers at level 3 were fairly equally spread between *chromatography*, *filtration* and *condensation*. The option *freezing* was rarely chosen by pupils at any level.

The pattern in the answers for part (aii) was similar to that of part (ai) with only pupils at levels 5 and 6 consistently choosing the correct option *chromatography*. The most commonly chosen incorrect option was *filtration*, followed by *condensation*; again, the option *freezing* was rarely chosen by pupils at any level.

Most pupils at levels 4, 5 and 6 gained the mark in part (bi) by stating that the washing-up liquid was alkaline. A common error by pupils at levels 3 and 4 was to say that it was coloured.

Most pupils at levels 4, 5 and 6 correctly stated that lemon juice would turn indicator solution red in part (bii). Of those pupils answering incorrectly, the majority gave an answer that was not even in the table (i.e. not blue or purple).

In part (c) pupils were expected to select *indicator* from four options. Half of pupils at level 4 and most pupils at levels 5 and 6 did this successfully. At all levels the most frequently chosen incorrect option was *solution*.

Facility values

	Tier 3-6			
	L3	**L4**	**L5**	**L6**
ai	.27	.52	.76	.83
aii	.27	.55	.79	.87
bi	.33	.66	.83	.92
bii	.43	.78	.87	.94
c	.35	.54	.74	.90

Q4.

The performance on the skeleton question was good. Nearly all pupils were able to identify a joint in the leg and to explain why joints are needed in the skeleton. Joints in the foot were deemed acceptable answers, largely because some South Asian languages use the same word for both *foot* and *leg*. Most pupils successfully identified muscles from a diagram, and which bones move during breathing and chewing. Some pupils associated the jaw bones with breathing or the upper jaw with chewing and had difficulty identifying which way the lower arm would move when the biceps contract.

Questions on digestion were generally well answered in 1998, as they have been in recent years, and questions related to diet were more successfully answered than in previous years. Many pupils knew that calcium is needed for strong bones and teeth, identified that oranges are a good source of vitamin C.

Q5.

Pupils at all levels recognised the equipment for filtration in part (a) and correctly suggested it should be used to separate sand from sea water in part (bi). In part (a) many pupils at levels 3 and 4 were unable to match the terms ‘distillation’ and ‘chromatography’ to the apparatus illustrated. Nevertheless, in part b(ii) two-thirds of pupils, including some who did not know the name of the process, chose the correct apparatus to separate pure water from salt water.

Facility values

Part	Omit (%)	Facility
(a) 1	2	0.57
(a) 2	2	0.54
(a) 3	1	0.83
(b)(i)	1	0.79
(b)(ii)	0	0.69

By level

Part	3	4	5	6
(a) 1	.28	.54	.64	.85
(a) 2	.35	.45	.57	.76
(a) 3	.56	.84	.89	.96
(b)(i)	.69	.79	.81	.89
(b)(ii)	.50	.60	.71	.86

Q6.

Most pupils at Level 5 and above correctly identified the factor changed in part (a). Of these, the majority referred to the size or form of the tablet, with few mentioning the surface area.

In part (b) few pupils at Levels 3 and 4 but over 75% at Level 5 and nearly all at Levels 6 and 7 correctly suggested the prediction made.

In part (c) few pupils at Level 3, about half at Level 4 and almost all at Levels 5, 6 and 7 correctly identified that temperature was the factor changed in the second investigation.

Almost all pupils at Levels 6 and 7, about 80% at Level 5 but few at Levels 3 and 4

correctly identified the pattern shown in the table of results in part (d).

In Part (e) the majority of pupils at Level 5 and above but few at Levels 3 and 4 were able to compare the two tables of results and estimate the temperature used in investigation 1. More pupils gave an answer that was above the correct range of temperatures than gave an answer that was below the correct range.

Q7.

In part (a) about 80% of pupils at level 7 correctly identified *B* as the force representing air resistance. The upwards vertical force (A) was the most common incorrect answer selected, with very few pupils selecting the downwards vertical force (C).

Most pupils at level 5 and above correctly identified the two balanced forces in part (bi) with only a minority choosing B and D or another incorrect combination.

Part (bii) proved to be the easiest part of the question with most pupils, even at level 4, correctly identifying one of two pairs of balanced forces, the vast majority choosing B and D.

In part (ci) about 60% of all pupils gained the mark, the most common error was to select *Force B is greater than force D* – the converse of the correct answer.

In part (cii) about 60% of all pupils gained the mark, the most common error was to select *Force C is greater than force A* – again the converse of the correct answer.

Facility values

	Tier 3-6				**Tier5-7**		
	L3	**L4**	**L5**	**L6**	**L5**	**L6**	**L7**
a	.15	.17	.32	.47	.37	.60	.79
bi	.37	.50	.75	.96	.85	.95	.98
bii	.51	.64	.82	.91	.90	.95	.98
ci	.16	.28	.50	.72	.63	.80	.94
cii	.19	.20	.46	.72	.62	.78	.93

Q8.

A substantial majority of pupils entered for tier 3-6, and almost all pupils entered for tier 5-7, were able to link the arrangements of particles to the correct states of matter.

Pupils in both tiers had difficulty determining states of matter from information about boiling and freezing points. Fewer than 30% of pupils entered for tier 3-6 were able to do this correctly. Although performance was better in tier 5-7, few pupils were able to identify correctly the physical state of all four halogens from the information given. Part (b) of this question, linking stored energy to states of matter, was a demanding question which few pupils answered correctly.

Q10.

Sc2/Sc3 7 marks Facility: 0.38 (Tier 3-6) / 0.66 (Tier 5-7)

Part (ai) discriminated well at all levels. Around 8% overall, mostly at Levels 4 and 5, incorrectly gave purple as the colour that hydrochloric acid would turn universal indicator.

At lower levels fewer pupils were able to identify the pH of an acidic solution in part (aii) than gave the correct colour of such a solution in the previous part. About a quarter of Level 4 and 5 pupils gave a pH of 8 or above.

The facility at the target level was slightly low in part (bi), with many pupils not linking the production of carbon dioxide with fizzing. At Levels 5 and 6 pupils taking the Tier 3-6 paper had significantly greater success than those taking the Tier 5-7 paper.

The variety of possible answers for part (bii) allowed many of those who attempted the question to gain a mark. The most common answer was to say that the acid was neutralised. Over 30% of pupils on both tiers gave other incorrect answers that included answers that did not make it explicit that no more carbon dioxide was produced.

Only at Level 7 were the majority of pupils able to gain both marks for part (c). Although 59% overall knew that magnesium chloride is a compound, less than a third knew that it is a salt. It was more common, particularly at Levels 4 and 5 for *mixture* to be ticked.

Part (d) discriminated well at all levels. Most answers referred to digestion or the breaking down of food. Pupils below Level 5 did not generally know why the conditions in the stomach are acidic.

Facilities by tier and level achieved

	3-6				**5-7**		
Item	**3**	**4**	**5**	**6**	**5**	**6**	**7**
ai	.13	.32	.63	.80	.63	.91	.98
aii	.06	.23	.53	.69	.54	.81	.95
bi	.02	.07	.22	.42	.18	.46	.71
bii	.03	.19	.42	.61	.43	.65	.75
c1	.19	.32	.50	.73	.51	.71	.91
c2	.06	.06	.09	.25	.18	.45	.79
d	.08	.26	.59	.78	.64	.80	.93