NAME:		**9A**

SCIENCE

Year 9 Examination 2008

9A – 40 marks

Make sure that you have answered all the questions in paper 9B before you start this paper
Time allowed for both examinations: 2 hours

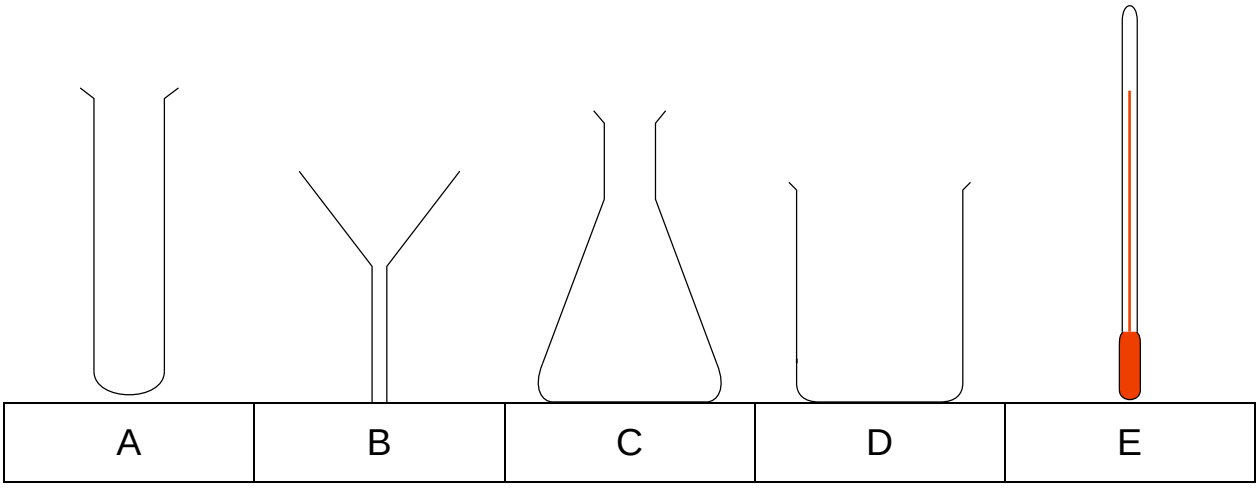
Answer all questions in the spaces provided on the paper.
You may use a calculator.
Show all your working in calculations; marks are awarded for it.
Give units for all answers (e.g. kg or m) unless they are already provided.

For Teacher Use Only

Question	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*Total*
Marks gained											
Marks available	***6***	***5***	***2***	***4***	***2***	***4***	***6***	***5***	***3***	***3***	***40***

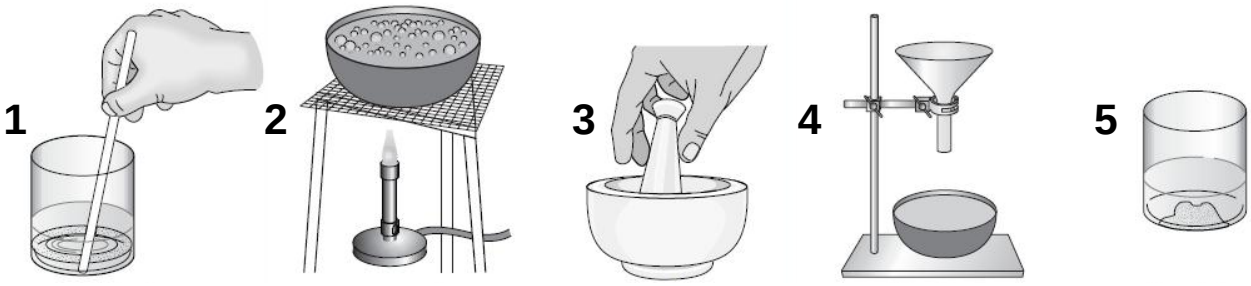
Question One: Equipment

a) Name the pieces of laboratory equipment drawn here.



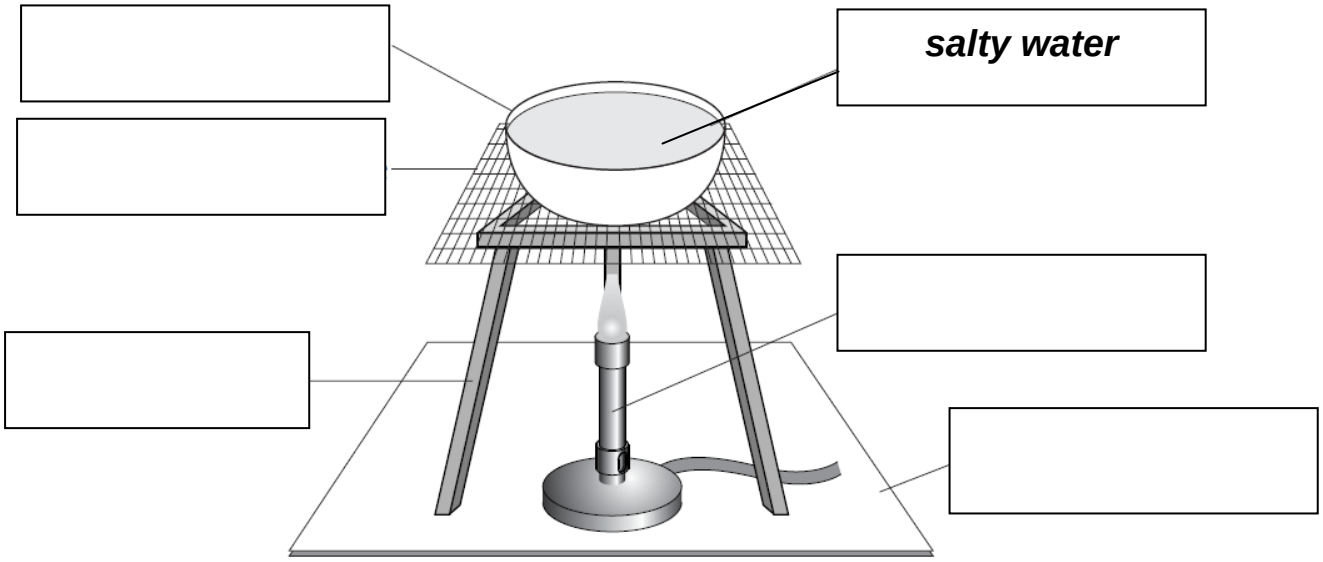
A	
B	
C	
D	
E	

b) Put the diagrams below in order to show how we can get pure salt from rock salt. Use the numbers 1 – 5.



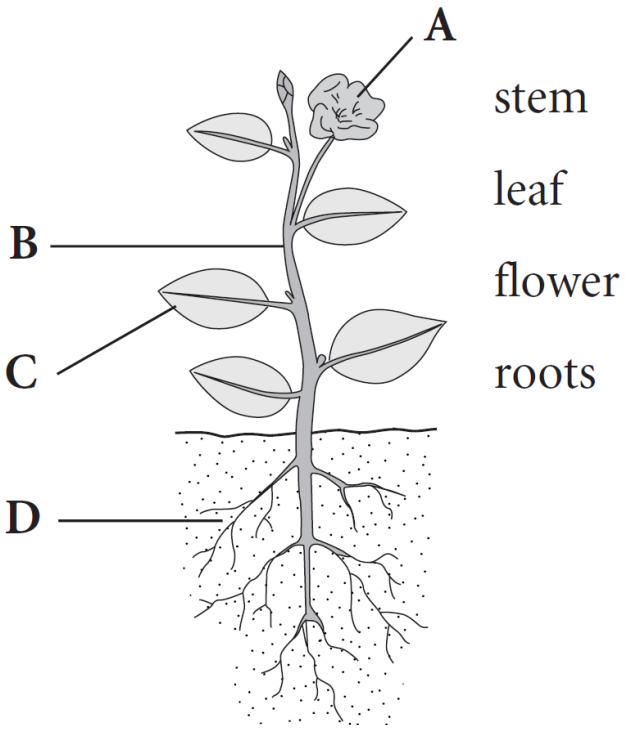
First step						Last step

c) Label the diagram that shows the salty water being evaporated.



d) Describe what would be seen in the basin at the end of the experiment.

Question Two: Plants



stem

leaf

flower

roots

a)

Match the letters A – D to the parts of the plant

b) What do these parts of the plant do?

Leaves
Roots
Flowers

Question Three: Changes

a) Are the things below examples of physical or chemical change?

Softening chocolate to pour it into a mould.	
Making up a fruit drink from powdered juice.	
Burning magnesium in a Bunsen flame.	

b) Choose a word from the box below to complete each sentence so that it is correct.

boils	condenses	melts	settles	freezes

i) Water _____ to turn into ice.

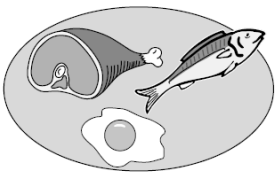
ii) Ice _____ to turn into water.

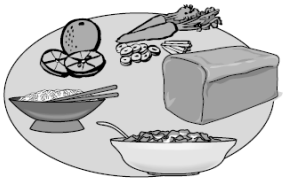
iii) Steam _____ to make water.

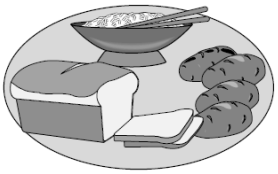
Question Four: Food

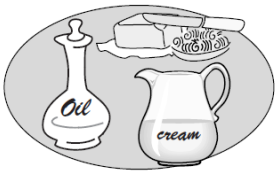
a) Write underneath each picture the food type you get from the foods. Use these words:

carbohydrates **fats** **fibre** **protein**





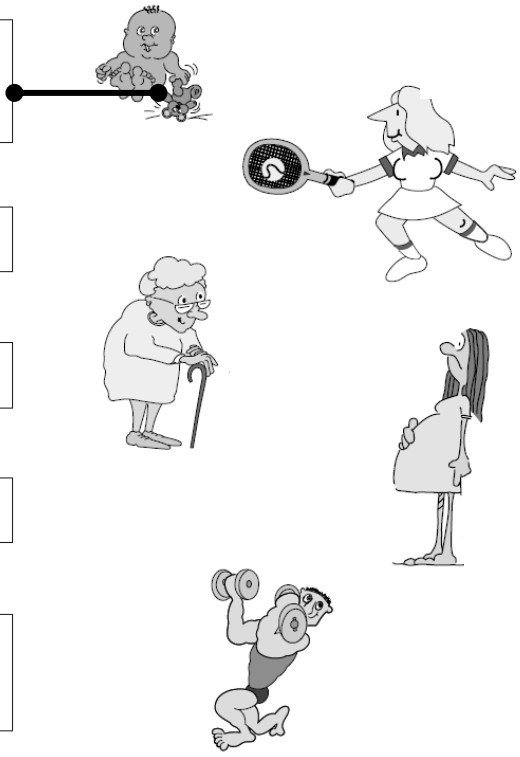




b) Draw lines to match each description with the correct picture. One has been done for you.

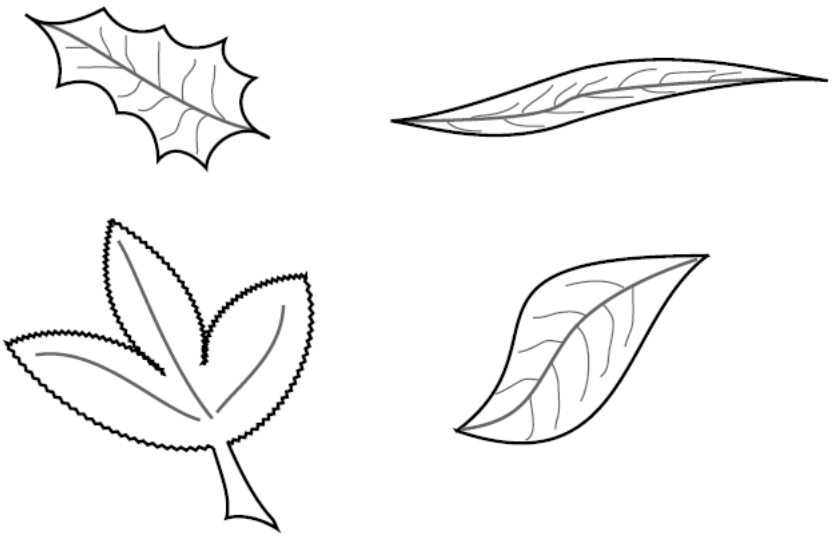
Descriptions

still growing, needs plenty of protein and carbohydrates for energy
using a lot of carbohydrates and fats for fuel
lots of protein needed to build large muscles
not growing any more, less food needed
extra protein, vitamins and minerals for growing baby



Question Five: Keys

A student goes for a walk and collects four different leaves.



Draw them in the correct the boxes to match the descriptions given below.

Leaves that have spiky edges

Leaves that do not have spiky edges

Has three sections

Has one section

Is wide

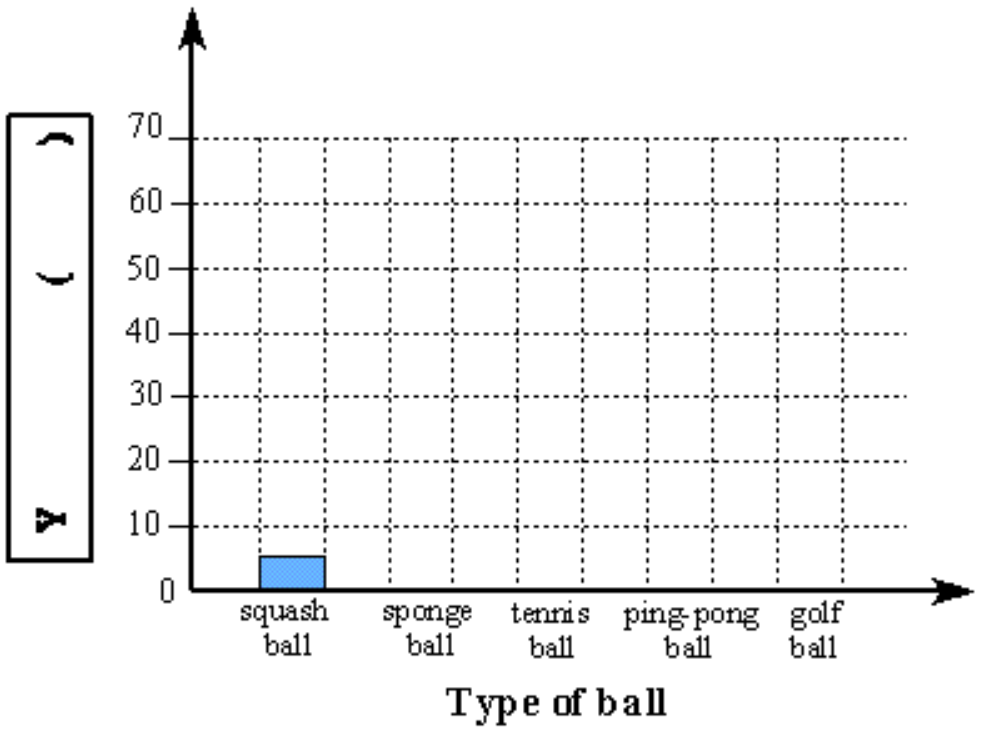
Is narrow

Question Six: Bouncy Balls

Here is some information on different types of balls and how high they bounce when they are dropped from the same height.

Type of ball	Average bounce height (cm)
Tennis ball	60
Sponge ball	35
Ping-pong ball	65
Squash ball	5
Golf ball	68

a) Using the information from the table above, complete the bar graph below. The squash ball has been done for you.



b) What label should go in box Y?

_____

c) What unit should go in box Y?

_____

d) What title should the graph be given?

_____

Question Seven: Light & Sound

a) Circle the names of all the things below that are a source of light.


Sun


mirror


candle


stars


torch

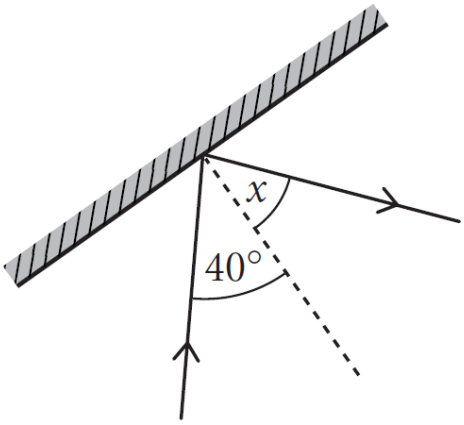

moon

b) Explain what is meant by a source of light.

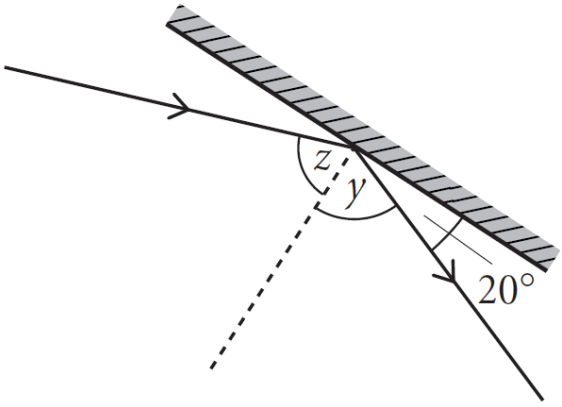
_____

_____

c) Fill in the missing angles when light reflects off a mirror.

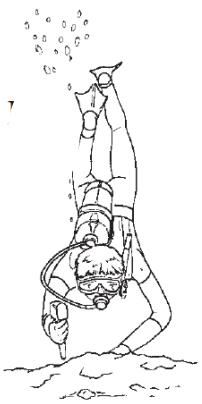


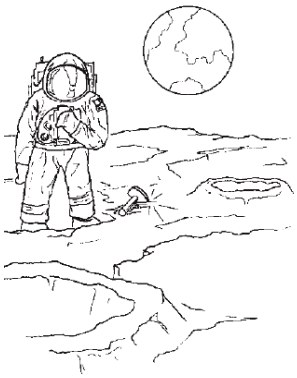
$x =$ ☐



$y =$ ☐ $z =$ ☐

d) These people can see what is happening, but can they hear it? Tick the ones who can hear, and put a cross by the ones who can't.





Question Eight: How hot is that?

a) What temperature? Write your answers on the lines beside each description. Two have been done already as examples.

i) Water boils **100°C**

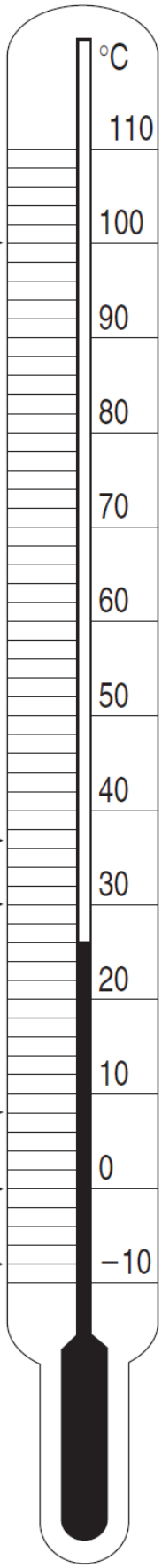
ii) Body temperature _____

iii) A hot day _____

iv) A cold day _____

v) Water freezes **0°C**

vi) Below freezing _____



b) Colour in the alcohol in this thermometer to show a temperature of 55°C

c) 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? Yes or No.		
Is the flame a clean flame? Yes or No.		
Is the flame very hot? Yes or No.		

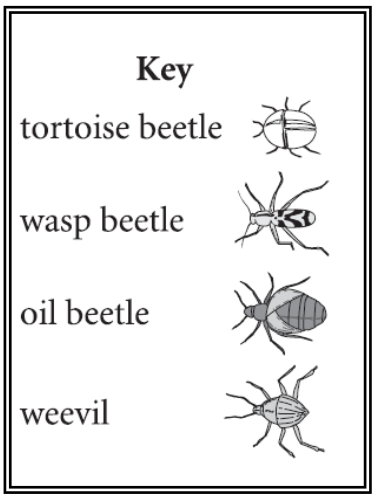
d) What does this symbol mean? Tick ONE.

a. Can make you ill if swallowed, breathed in or absorbed through the skin

b. May cause reddening or blistering of the skin

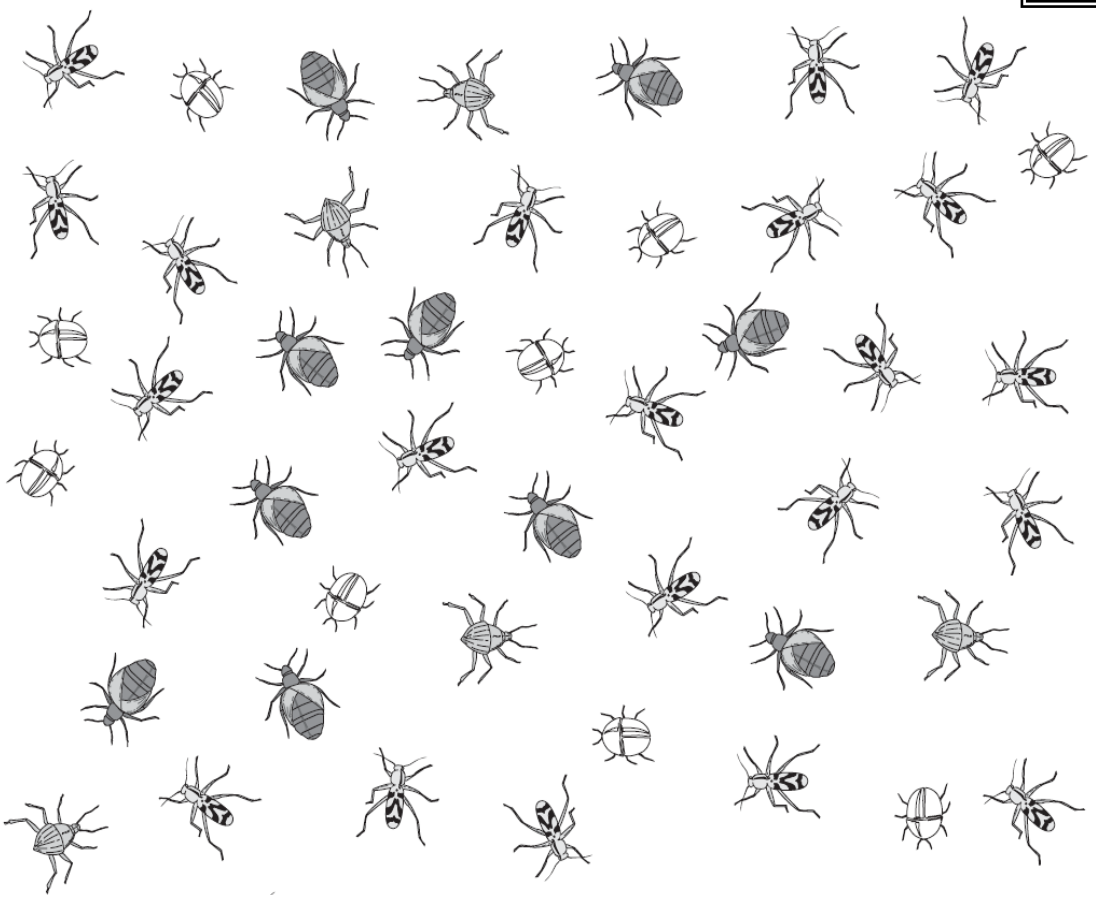
c. Attacks and destroys living tissue including eyes and skin

Question Nine: Insects in the garage



As part of a Science Project, a student collected all the insects that she found in a square metre area of her garden.

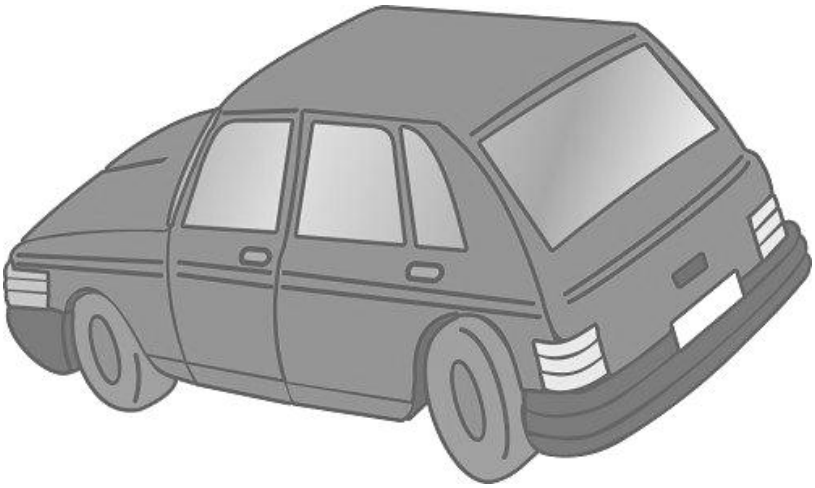
She found tortoise beetles, wasp beetles, oil beetles and weevils.



In the space below, draw a <u>results table</u> to show the number and type of insect she found.

Question Ten: Materials And Their Uses

Materials used in a modern car include **steel, glass, plastic, rubber, lead and copper**.



a) The windscreen is made of glass.
Choose the BEST material for the other five parts of a car.

electrical wiring	car body	tyres	steering wheel	plates in a car battery

b) Explain why glass is a good material to use to make a car windscreen.
Give THREE reasons.

1.
2.
3.