

NAME:

SCIENCE TEACHER:

3A



# SCIENCE

## YEAR NINE EXAMINATION 2002

### Level A

*Total time allowed for both examinations: 2 hours*  
**(40 marks)**

Answer all questions in the spaces provided on the paper.

You may use a calculator.

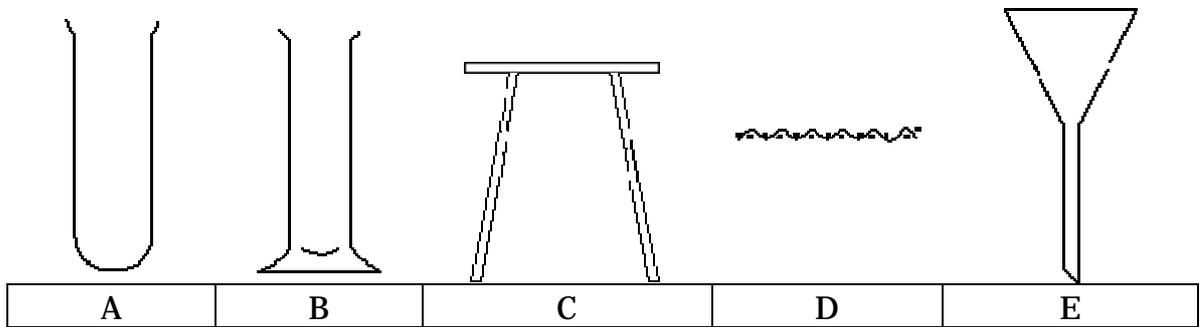
Show all your working, marks are awarded for it.

Give the units for all answers (e.g. kg or metres) unless they are already provided.

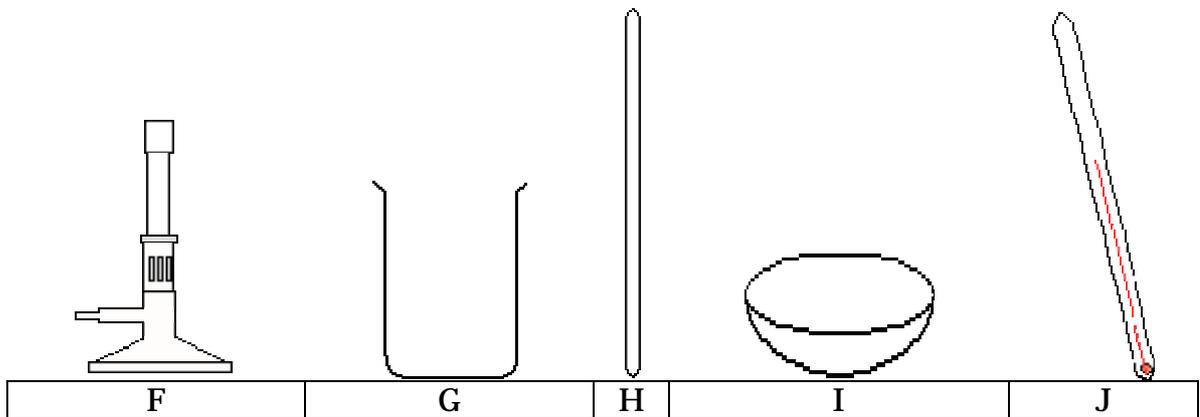


**Question one:**

(a) Name the pieces of laboratory equipment drawn here. (6)



A	
B	
C	
D	
E	



F	
G	
H	
I	
J	

(b) Write the letter(s) of the **piece** or **pieces** of equipment you would use to: (3)

(i) filter muddy water

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(ii) measure the volume of a small stone

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(iii) evaporate a solution of copper sulfate

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**Question Two:** (3)

Are the things below examples of **melting** or **dissolving**.

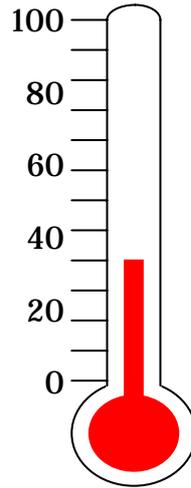
Heating butter to make muffins.	
Making up a fruit drink from powdered juice.	
Using boiling water to make up jelly from jelly crystals	

**Question Three:** (3)

Each of the following pairs of substances are mixed together. Write **Yes** or **No** to show if the change is permanent.

Water and oil.	
Baking soda and vinegar.	
Salt and sand	

**Question Four:**



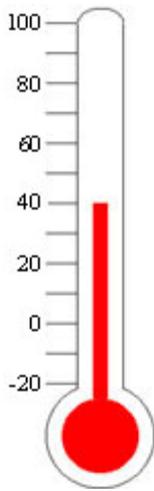
a) What is a thermometer used for? (1)

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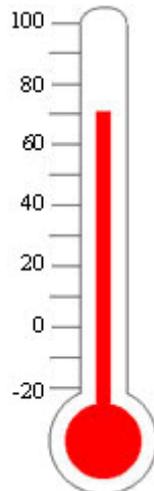
b) What happens to the liquid in the thermometer when it is moved from a cold place to a warm place? (1)

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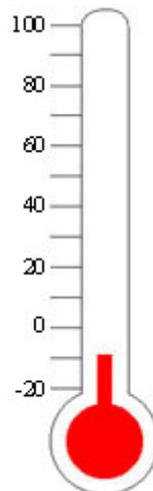
c) What temperature is shown on these thermometers? (2)



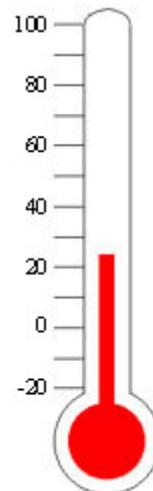
i)



ii)



iii)

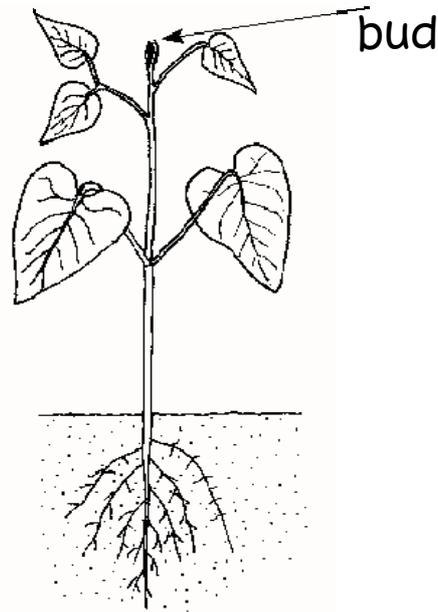


iv)

d) Why do hospitals take the temperature of people who are unwell? (1)

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**Question Five:**

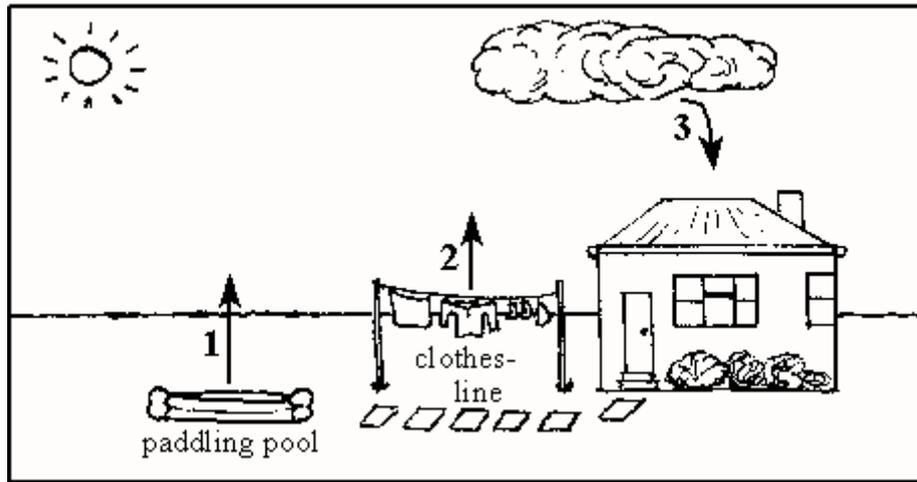


(a) Label the diagram using the words provided. (The first one has been done for you.) **Bud Stem Root Soil Leaf** (4)

(b) What do these parts of the plant do? (3)

Leaves
Roots
Flowers

**Question Six:**



The diagram shows some ways in which water moves in the water cycle.

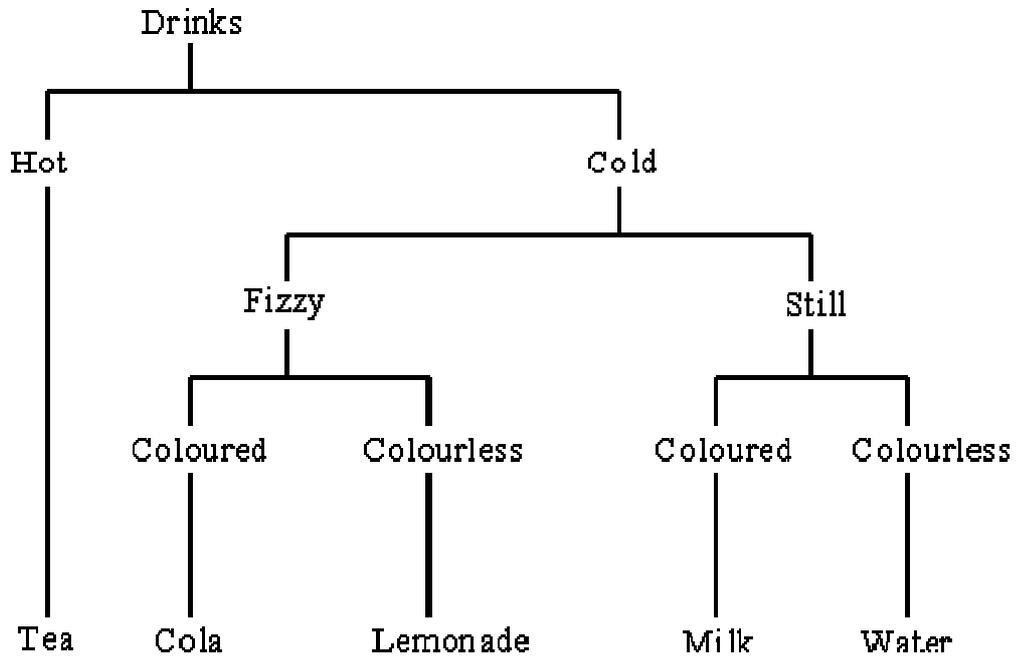
- a) Explain what is happening in the water cycle at each of the arrows 1, 2, and 3. (3)

Arrow 1:	
Arrow 2:	
Arrow 3:	

- b) Explain how the water that falls as snow in the mountains might get to the sea. (1)
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**Question Seven:**

**Key for choosing drinks**



Use this key to find out which drink each student chose. Write down the name of the drink. (4)

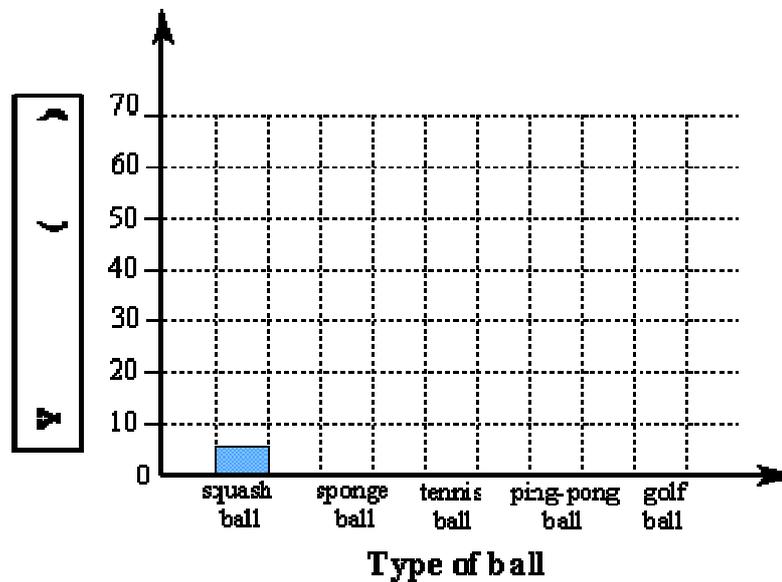
Peter doesn't want a cold drink. He chose	
Jane chose a coloured, still drink. She chose	
Amy doesn't want a hot drink or a coloured drink. She likes still drinks. She chose	
Susan chose a cold, fizzy, coloured drink. She chose	

**Question Eight:**

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. [2]



- b) What **label** should go in box Y [1]

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- c) What **unit** should go in box Y? [1]

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- d) What title should the graph be given? [1]

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**Question Nine** – Forensic Science Wordfind. Only do this if you have spare time.  
It will not be marked as part of the exam.

F	W	O	L	F	O	R	E	N	S	I	C	P	R	Y
S	H	O	E	I	W	O	O	L	B	L	O	O	D	H
E	O	F	E	N	I	D	O	I	A	N	S	L	I	P
P	R	I	C	G	Y	M	O	T	D	H	A	I	R	A
W	L	B	L	E	N	S	A	R	E	M	A	C	U	R
I	C	R	S	R	E	C	N	E	D	I	V	E	V	G
T	A	E	D	P	L	A	S	T	E	R	E	N	I	O
N	R	N	L	R	O	B	B	E	R	U	U	E	C	T
E	A	A	C	I	D	I	T	Y	L	G	M	P	T	A
S	N	M	N	N	T	S	A	C	R	O	H	A	I	M
S	O	K	U	T	H	E	F	T	H	E	E	T	M	O
A	B	I	O	D	E	R	U	T	A	N	G	I	S	R
C	R	C	L	A	Y	E	U	Q	E	H	C	R	N	H
I	A	C	R	I	M	E	M	U	R	D	E	R	O	C
D	C	E	H	S	U	S	P	E	C	T	E	R	I	F

ACID  
BLOOD  
CARBON  
CHROMATOGRAPHY  
CRIME  
FIBRE  
FORENSIC  
HAIR  
IODINE  
MURDER  
PH  
ROBBER  
SIGNATURE  
TALC  
VICTIM  
WOOL

ACIDITY  
CAMERA  
CAST  
CLAY  
DYES  
FINGERPRINT  
FORGERY  
HOME  
LENS  
MUD  
PLASTER  
SAND  
SOIL  
TAPE  
WHORL

ARCH  
CAR  
CHEQUE  
CLUE  
EVIDENCE  
FIRE  
GUN  
INK  
LOOP  
PEN  
POLICE  
SHOE  
SUSPECT  
THEFT  
WITNESS

