



ST. FRANCIS SECONDARY SCHOOL
HALF-YEARLY EXAMINATION SPECIMEN PAPER

FORM 1

SCIENCE

TIME: 1.5 HOURS

Name: _____

Class: _____

- Read instructions carefully and answer **ALL** questions in the spaces provided using Black/Blue ink.
- Do not scribble on the exam paper. Work in pencil will be considered as rough work.
- Please fill in your Name and Class in BOTH of the spaces provided on this first sheet.

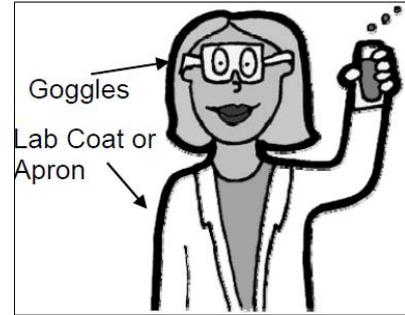


Name: _____ Class: _____

Question Number	1	2	3	4	5	6	<i>Total</i>
Mark	15	20	15	10	20	20	<i>100</i>
Mark Obtained							

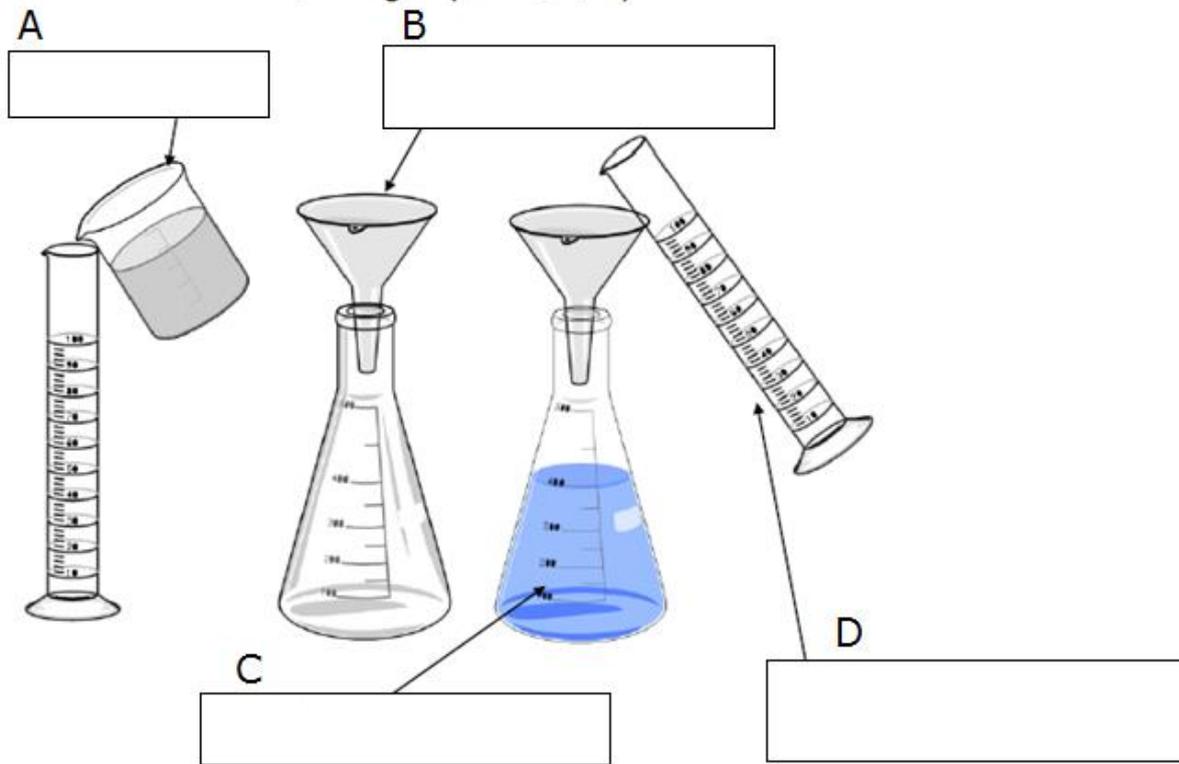
Remark : _____

1. This question is about different apparatus used in science.



a) Fill in the names of the lab equipment shown in the space given below.

Transferring Liquids Safely



A: _____

B: _____

C: _____

D: _____

(8 marks)

b) Match the correct equipment and write the name of the apparatus down, next to the use mentioned in the table below.

Object name	Used for
	Used to pick up or hold hot objects
	Used for cleaning the inside of a test tube
	A device to measure the mass or “mass out” and object or substance.
	for transferring a small amount (drops) of liquid
	for holding one or more test tubes
	Used to heat objects
	platform holds heating unit; pole holds clamps

(7 marks)

(Total: 15 marks)

2. Cassie has a feather, a small rock, a small piece of metal and a glass bead. She wants to find out if they have different volumes.

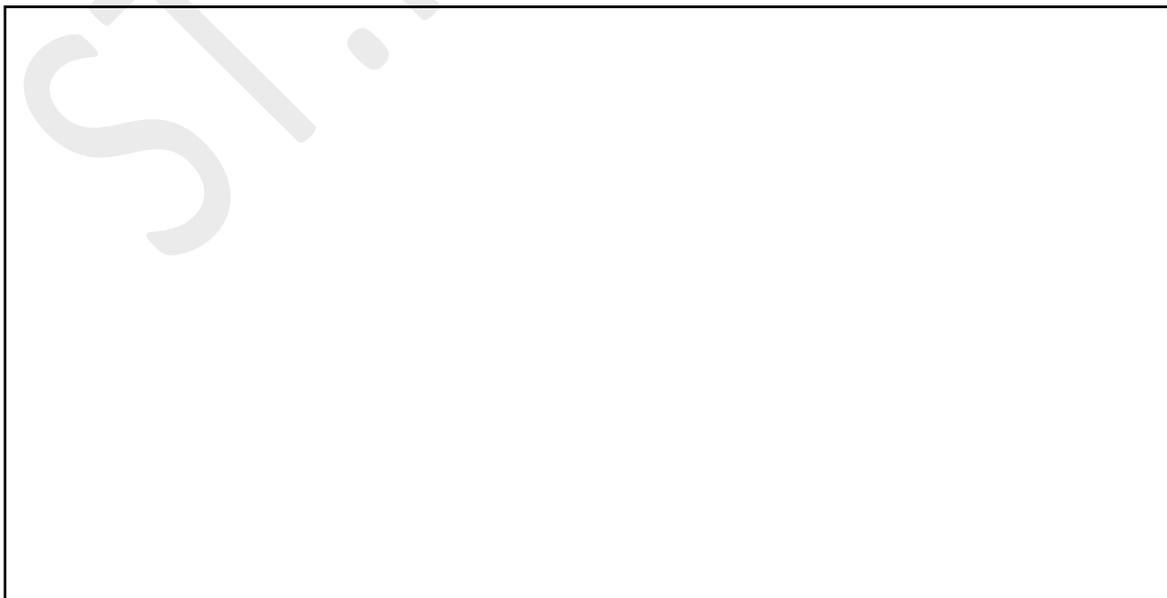
a) Write a method showing how Cassie can find out the different volumes of each irregularly shaped object mentioned above. Your method should include all the apparatus needed.

Method:

(5 marks)

b) In the space given below, draw a diagram showing the set-up of the apparatus that Cassie needs to use to find out the volume of the irregularly shaped objects.

(2 marks)



c) List three precautions that Cassie has to take during this experiment.

(3 marks)

(Total: 10 marks)

3. This question is about food chains and food webs.

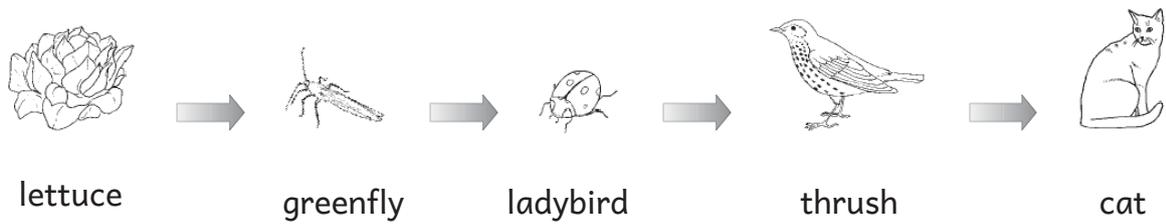
a) Fill-in the empty spaces using the correct word.

All living organisms (plants and animals) must eat some type of food for survival. Plants make their own food through a process called _____ . Using the energy from the _____ , water and _____ from the atmosphere and nutrients, they chemically make their own food. Since they make or produce their own food they are called _____ .

Organisms which do not create their own food must eat either plants or animals. They are called _____. Some animals get their energy from eating plants while other animals get energy indirectly from plants by eating other animals that already ate the plants. Animals that eat only plants are called _____. Animals that eat both plants and other animals are called _____. Animals that eat only other animals are called _____. Some animals eat only dead or decaying materials and are called decomposers.

(8 marks)

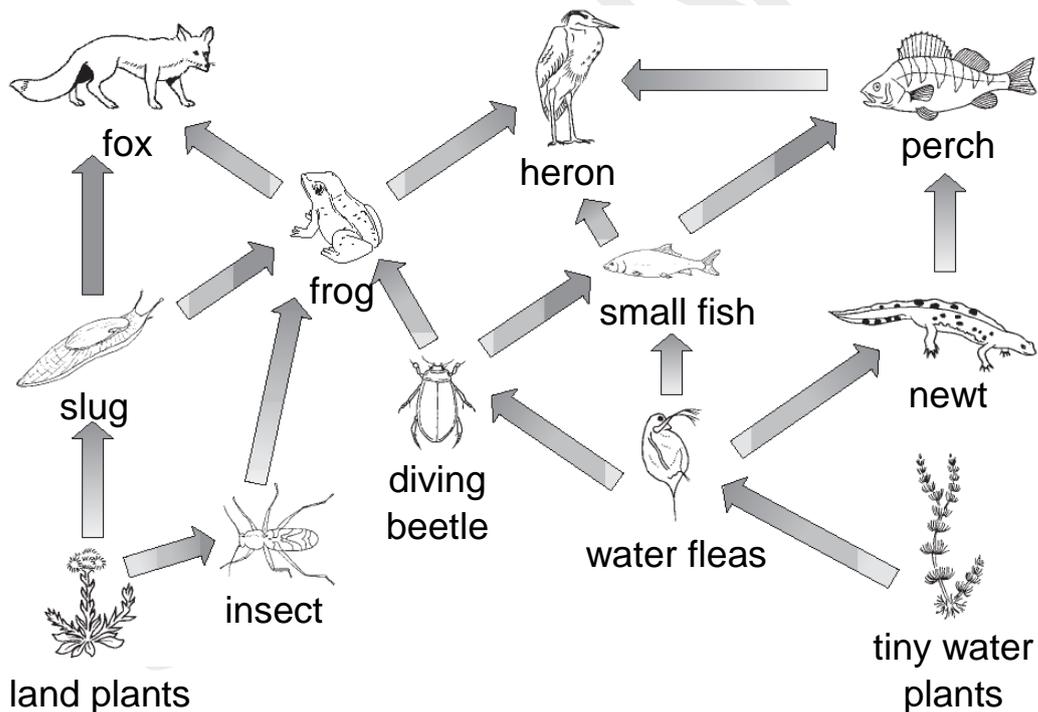
b) Look at this food chain.



- i. What does the arrow in a food chain mean? _____
- ii. Name the producer in the food chain _____
- iii. Name the third trophic level in the food chain. _____
- iv. Name the tertiary consumer in the food chain. _____

(4 marks)

c) Look at this food web. Then answer the questions.



- i. Write a food chain from this food web with six trophic levels.

ii. Name the animals that the small fish eats.

iii. Name the animals that eat the small fish.

iv. Explain what could happen to the community if all the frogs suddenly died.

(4 marks)

(Total: 16 marks)

4. This question is about animal adaptations to their environment.

a) Name an animal for each example below. Name one adaptation of body covering or body part that helps the animal to survive in its environment.

	Animal	Adaptation
Lives in water		
Lives in cold, icy climate		
Builds its nest in a tree		
Eats water plants and animals		
Feeds on grasses		

(10 marks)

b) In a population of insects, there were two colour variations: green and brown. One dry summer, all of the grass where the insects lived dried up and died. What do you think happened to the insects? Be sure to explain what happened to the green insects and the brown insects.

(3 marks)

(Total: 13 marks)

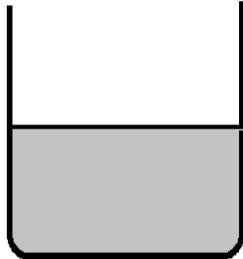
5. This question is about States of Matter

a. For the following phrases state what change of state is taking place from the list below (5 marks)

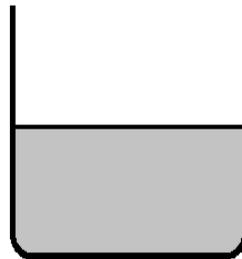
- | | | | |
|-------------|---------|--------------|----------|
| Evaporation | Melting | Condensation | Freezing |
|-------------|---------|--------------|----------|

SITUATION	CHANGE OF STATE
Clothes drying on the roof	
Mirror fogging in a bathroom after a	
Puddles vanishing in the yard	
Formation of ice-cubes in the freezer	
Olaf snowman left in the sun	
Droplets forming on a bottle of water	
Ice cream left in the sun	
Water collecting in the dehumidifier or	
Formation of clouds	
Steam coming out from a kettle heated	

b. Miriam sets up a test to find out if water evaporates faster inside the classroom or outside in the yard. She puts water in two containers as shown below.



Water Inside the classroom



Water outside in the yard

i. Name one thing that Miriam needs to do to have a fair test. (1 mark)

ii. Below are the results Miriam obtained.

	Inside the class	Outside the yard
Time taken for all water to evaporate/ hours	7.5 hrs	5 hrs

Where does the water evaporate fastest? Explain why. (2 marks)

- iii. Miriam repeats the experiment the next day using the same amount of water, the same cups and putting them in the same places. However this time the water outside evaporates faster. Give one possible reason why this happens. (1 mark)

- iv. List the apparatus Miriam would need to make a fair experiment. (2 marks)

(Total: 11 marks)

6. This question is about solids, liquids and gases

During our stay at Mandy's house I had a shower and rushed downstairs for breakfast. Her mother prepared a glass of cool orange juice. Mandy took some cereal with milk in a bowl. Before eating her food Mandy made sure that the dog Pippa had plenty of water in her bowl and some dried food in her blue bowl.

- a. From the text write down two examples of liquids. (1 mark)

- b. Underline the solids in the following list. (3 marks)

Metal	water	paper	wood
Rock	helium	plastic	lemonade
Hydrogen	cotton	air	

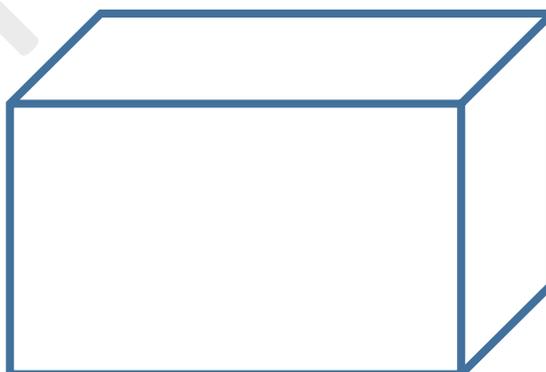
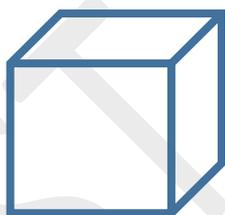
c. Give two examples of gases. (1 mark)

d. In a syringe there is a mystery substance. I try to squeeze it but I am not able to do so. What could be inside the syringe? Underline the answer/s. (1 mark)

- Solid ice
- Lemonade
- Air

e. Megan's teacher said that gases spread out to completely fill up any container. Do you think she is right? (1)

i) Below there are two containers. Show how 7 of these gas particles behave. (2)



ii) Do you think that the particles of a solid and a liquid also spread out to fill up any container? Write yes or no as an answer. (1)

Solids: _____

Liquid: _____

(Total: 10 marks)

7. This question is about using the Bunsen Burner

- a. Martha decided to show her brother Jason how to light up the Bunsen Burner and use it to heat 40ml of water to 75°C. Can you help her by putting the steps in order by putting a number from 1 to 6 near each of the statements below ? (3)

Statement	Number
Open the gas tap	
Close the airhole	
Tie your hair, wear your safety spectacles and clear the bench from any papers or flammable materials.	
Turn the airhole to have a blue flame	
Put the beaker with the water and the thermometer on the tripod	
Stay at arm's length from the Bunsen burner and keep your face off the fire. Use a spark from the flicker light	

- b. What measuring apparatus would Jason need to do this experiment?

(2 marks)

(Total: 5 marks)

8. This question is about safety in the lab and hazard symbols.

a. The laboratory is a different room from the classroom or the art room.

Mention two safety rules that must be practiced by everyone in the lab.

(2 marks)

b. This glue is used by Thomas the carpenter to fix some of the furniture.

It carries two hazard symbols. Explain what the hazard symbols mean.

(2 marks)



c. What part of the fire triangle is removed in these situations: (2 marks)

- Cutting down trees from a forest to limit a forest fire. _____
- Spraying foam on a burning plane. _____

(Total: 6 marks)