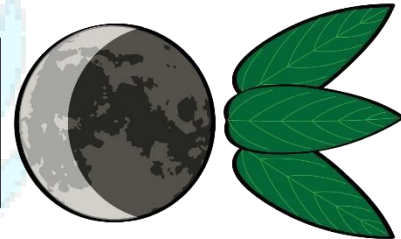
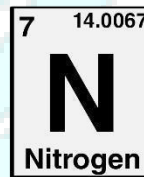
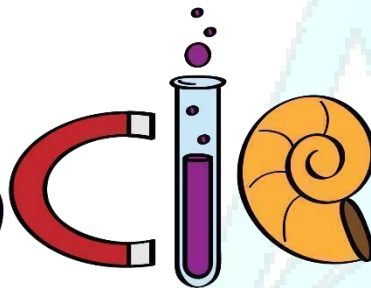
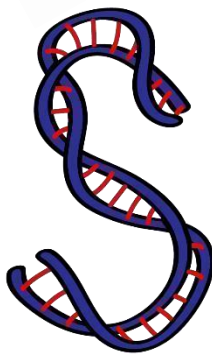


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INTERNATIONAL SCHOOL



Science Department

2023/2024

Year 4

End of term pack

Term 1, Week 13

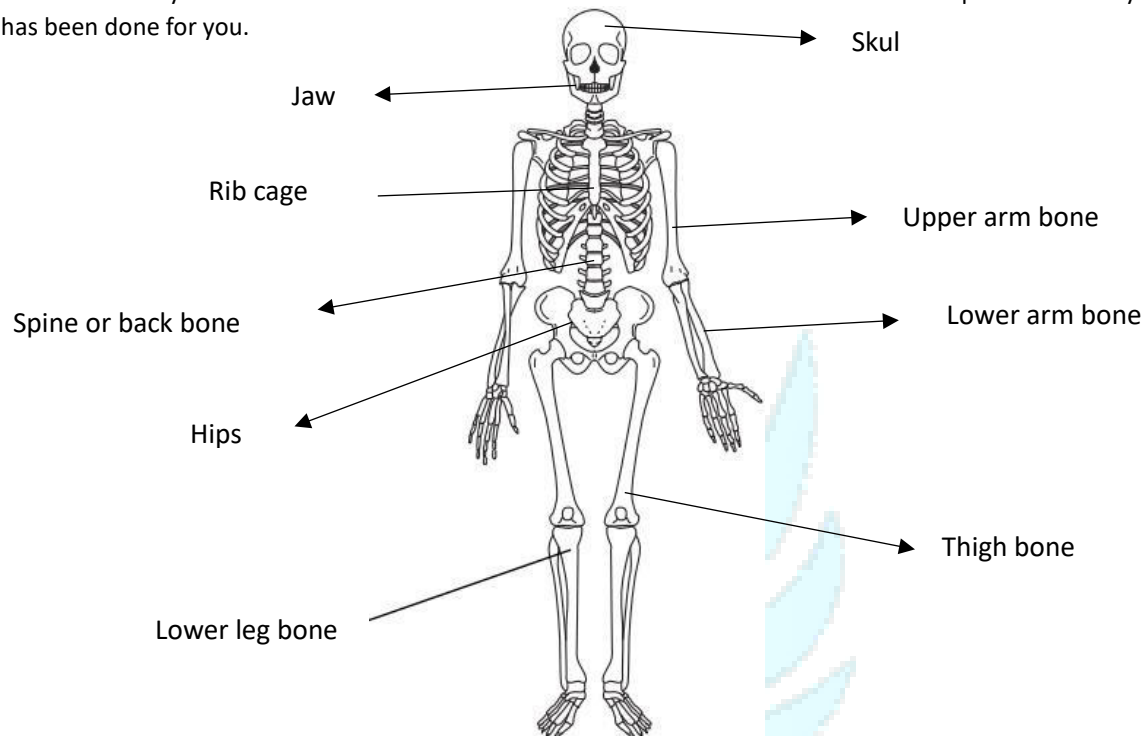
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Name:

Class:

1. Humans have bony skeletons inside their bodies. Draw a line from each label to the correct part of the body. One has been done for you.



(a) Something that gives support and shape from the inside. **Skeleton**

(b) Animals with no backbone. **Invertebrates**

(c) What is the main function of the skeleton. **(p.s.h.h)**

- **Protect out soft organ**
- **Give us shape and support**
- **Help us to move**
- **Help us to grow**

(d) An object or drawing that helps us understand how something works, or what something looks like, that we can't see in real life. **A Model**

(E). Write one word for each of the underlined parts in the following sentences.

1. The job or use of the ribs is to keep safe the heart and lungs.

Protect

2. The heart and lungs are parts inside the body that do different jobs.

Functions

3. Muscles always work in groups of two. When one muscle gets shorter, the other muscle gets longer.

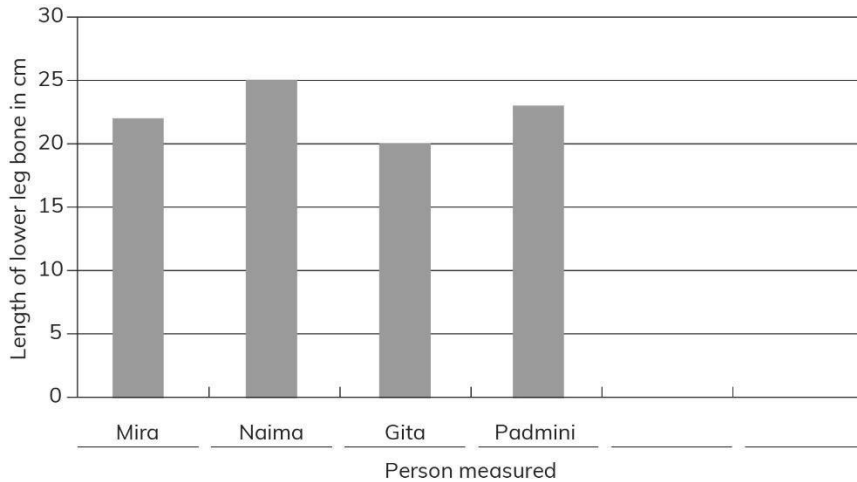
Pairs

4. A crab has a hard covering on the outside of the body.

Exoskeleton

2. (a) Draw a graph of bone length

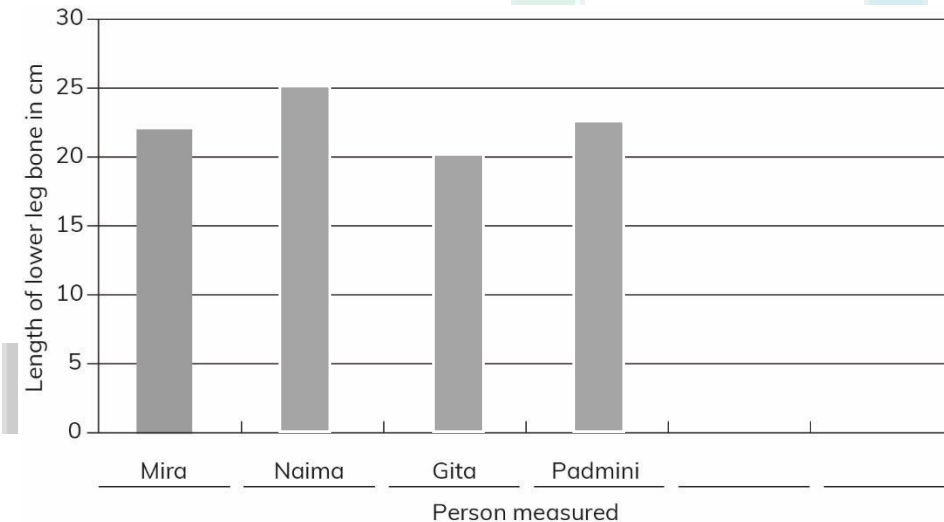
Mira's group measured the lengths of their lower leg bones. These are their results.



(b) Record the results in the table.

Name	Length of bone in cm
Mira	22
Naima	25
Gita	20
Padmini	23

(c) Draw a new bar chart of the results showing the bone lengths in order from shortest to longest.



a Whose leg bone was longest? **Naima**

b Whose leg bone was shortest? **Gita**

What is the difference in length between the shortest bone measured and the longest bone measured? **22 - 25 = 3**

3. Olivia wants to study how many insects land on different coloured paper in the garden.



She takes three pieces of paper. Complete the table to show what she must change or keep the same about the paper to make it a fair test.

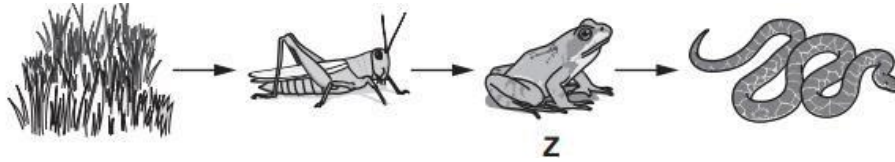
	Shape of paper	Size of paper	Colour of paper
Change			/
Keep the same	/	/	

4. The skeleton has many functions. Draw a line to match each part of the skeleton to each function.

part of the skeleton	function
leg bones	protects the heart
rib cage	enables movement
jaw	gives shape to the head
skull	supports the mouth

Note: Hand-drawn green lines connect 'leg bones' to 'enables movement', 'rib cage' to 'protects the heart', 'jaw' to 'gives shape to the head', and 'skull' to 'supports the mouth'.

5. Food chains contain living organisms.



Use the key to identify the living organism labelled **Z**.

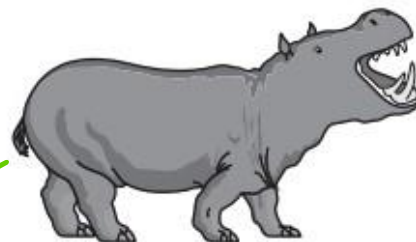
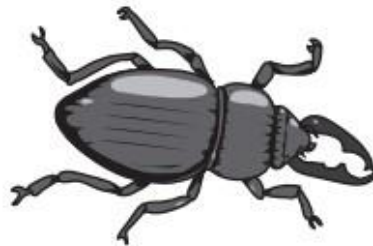
1 Is it a producer? yes Poaceae
 no go to question 2

2 Is it a herbivore? yes Caelifera
 no go to question 3

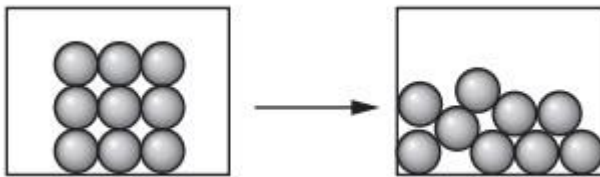
3 Is it a predator and a prey? yes Anura
 no Serpentes

4 Living organism Z is **Anura**

6. Some animals have an exoskeleton. Put a tick (v) next to all the animals with an exoskeleton.



7. Mia draws two particle models.



What does the arrow show?

Circle the correct answer.

- change from a mixture to one substance
- change from liquid to solid
- change from one substance to a mixture
- **change from solid to liquid**

8. Some solids behave like liquids.



Describe how the sand is behaving like a liquid.

We call the solids that behave like liquids powders

They can be poured and take the shape of the container and slide over each other which make them behave like liquid

Explain why sand can behave like a liquid.

Powders behave like liquids because they consist of small grains that have air spaces between them that allow them to slide past each other like liquid

9. Gabriella has a picture

(a) What happens to the sound energy and heat energy?

The energy of sound and heat will transfer to the surrounding environment.

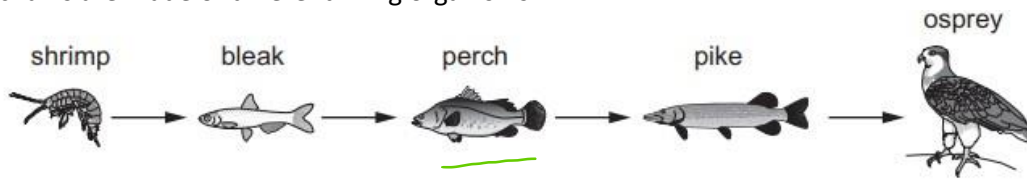
(b) The turbines are moving. Where do the turbines get their energy from?

Wind

turbines



10. Food chains are made of different living organisms.



(a) What type of living organism is missing from the start of this food chain?

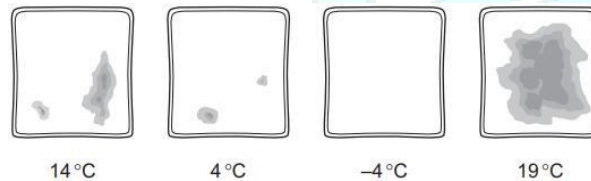
Producer (plant)

(b) What type of organism is the perch?

Circle the correct answer.

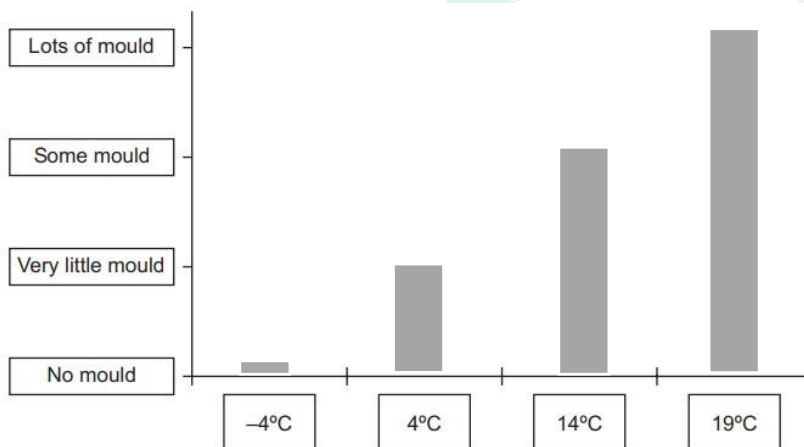
(carnivore and herbivore - herbivore and predator - herbivore and prey - **predator and prey**)

11. A class investigates what happens to bread when left at different temperatures. They leave 4 slices of bread for 10 days. This is what the bread looked like after 10 days.



(a) At what temperature did the bread go most mouldy? **19 °C**

(b) Complete the bar chart below to show their results.



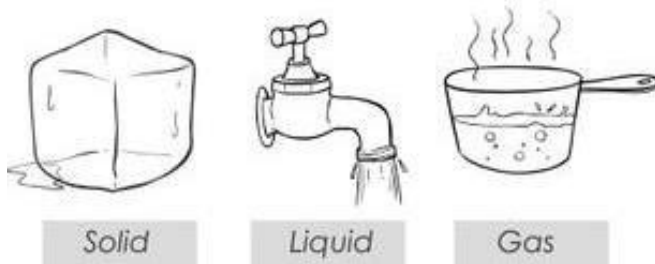
(b) What happens to the amount of mould as the temperature changes? Fill in the missing word to complete the following statement.

The lower the temperature, the **Less** the mould.

This kind of statement is made at the end of an investigation. What is this type of statement called?

conclusion - explanation - prediction - results)

12. Answer the following questions about Matter and its properties



(a) Which state of matter has smallest space between its particles?

(b) Draw straight lines to match the state of matter with the description of the spacing of the particles.

state of matter	description
gas	spread far apart
liquid	closely packed in a regular pattern
solid	closely packed but not in a pattern

13. describe how the energy changes in the following pic



Electrical energy> sound energy







Electrical energy> Light energy

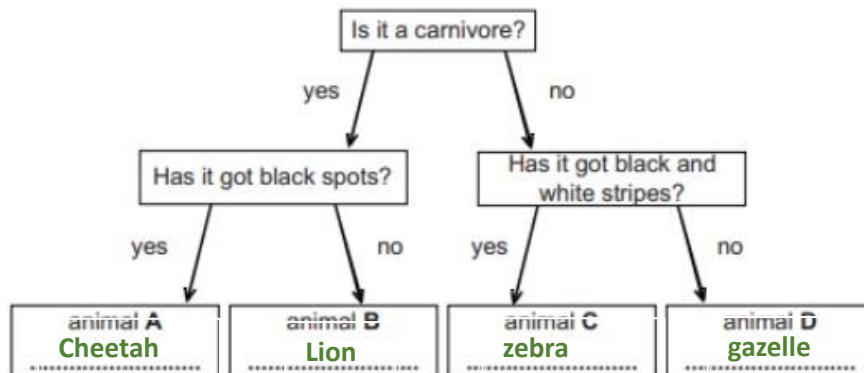


Movement energy> Sound energy

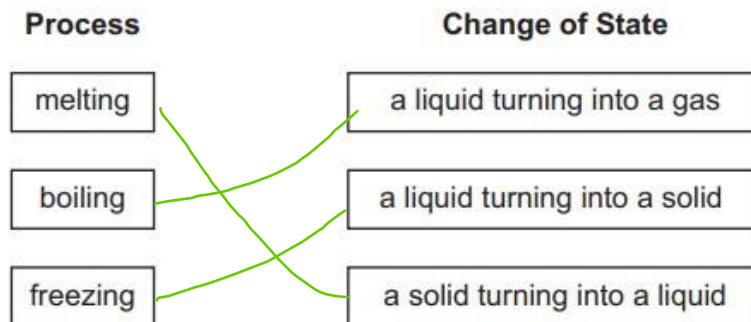
14. Janek has found some information about animals that live in Africa.

animal	what it eats	colour
 lion	wildebeest zebra impala gazelle	brown
 zebra	vegetation	black and white stripes
 cheetah	wildebeest zebra impala gazelle	brown with round black spots
 gazelle	vegetation	brown

(a) Write the names of animals A, B, C and D in the boxes.



15. Draw straight lines to match the Process to the Change of State.



16. Look at the label on the bottle of tablets that belong to Mrs Pather.

- a What time of day should Mrs Pather take her tablets?

After breakfast and after supper

- b What is the total number of tablets Mrs Pather must take?

Tablets for 5 days

$2 \times 5 = 10$ tablets

- c Should she take her tablets before she eats food? How do you know?

No..... form the instruction on the tablets bottle

- d Write two more instructions for how to take medicine safely.

You must follow the instructions

You must ask for help from doctor or your parents



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17. The pictures show different kinds of animals.



eagle



snail



crab



fish



hen



earthworm



locust



goat



owl



snake

Sort the animals into two groups. Write the names of the animals in each group in the circles.

Group A



Group B



b Which features of the animals did you use to sort them into the groups?

Group A: Animals with bones/vertebrates.

Group B: Animals with no bones/invertebrates.

18. Write the correct words in the spaces in the sentences below. Use the words in the box.

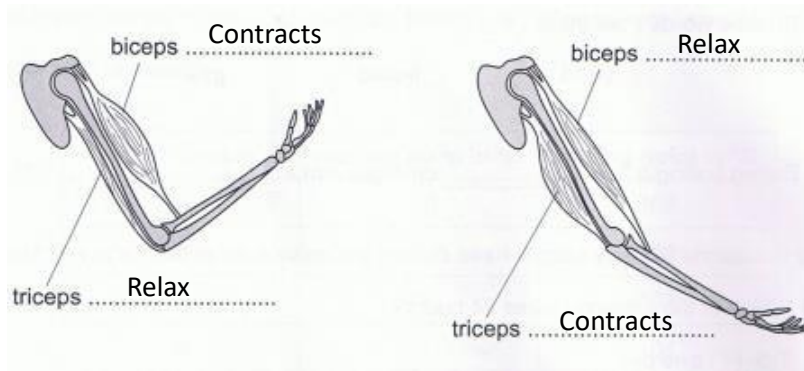
You will need to use some of these words more than once.

particles liquid melt solidify solid state matter

- a Everything consists of _____ **matter** _____.
- b All matter consists of _____ **particles** _____.
- c If the _____ **particles** _____ are closely packed, so that they can only move a little bit, the substance is a _____ **solid** _____.
- d If the _____ **particles** _____ are more loosely packed so that they can slide over each other, the substance is a _____ **liquid** _____.
- e Heating causes a solid to _____ **melt** _____ and change state from solid to _____ **liquid** _____.
- f Cooling causes a liquid to _____ **solidify** _____. For example, water changes into ice.

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19. Class four are looking at a diagram of the human arm.



(a) What are biceps and triceps?

.....**Muscles**

(b) To make the arm move the biceps and triceps either relax or contract.

(c) Write contract or relax after biceps and triceps to say what is happening in each diagram.

20. Choose the correct word that matches the sentence:

Pairs - contracts - relaxes - shorter - longer - Pulling - bones - muscles - vertebrates - invertebrates - 600

• When I lift a weight, the muscle at the front of my arm..... **contracts** and gets **shorter**

• The muscle at the back of my arm **relaxes**And gets**longer**.....

• This shows that muscles work in **Pairs**

• Muscles work by **Pulling** one the **bones** They joined to.

• The muscular system is consisting of **muscles** While the skeletal system consists of **bones**

• Animals with bones are called **vertebrates** while animals without bones are called **invertebrates**

• About**600** muscles in our body make up the muscular system