



ACADEMIC WORLD SCHOOL™
BEMETARA

SUMMER ASSIGNMENT

Class -III

Subject - Science

Unit-I

Plants & Animals

1

Living and Non-Living Things

Do You Remember

Identify the pictures and write their names in the boxes given below.



Let Us Learn About

- Living things
- Non-living things
- Natural and man-made things

We see a lot of things around us. For example, colourful flowers, birds, animals, computers, aeroplanes, mountains and air conditioners etc. All these things can be divided into living and non-living things.

• LIVING THINGS

Things which have life in them are called **living things**. They can grow, breathe and **reproduce**. For example, human beings, animals and plants.

reproduce: to give birth to young ones





Human beings



Animals



Plants



Look at the picture and list the living things.

1. _____
2. _____
3. _____
4. _____



FEATURES OF LIVING THINGS

All Living Things Move

Living things move from one place to another on their own for food, shelter and safety. For example, human walks/runs with the help of legs, insects and birds fly, fish swim and dogs and cats walk.



The cheetah is the fastest land animal with speed of 110–120 km/hr.



Birds fly



Fish swims



Horse runs



Humans walk

Though plants do not move from one place to another, they show movement of their parts. For example – a sunflower always turns towards the sun, the leaves of a touch-me-not plant close when they are touched.





Sunflowers turn towards the sun



The leaves of a touch-me-not plant close when touched

ALL LIVING THINGS GROW

All living things grow in size and change their shape. For example, a little puppy grows into a dog, a kitten grows into a cat.



A puppy grows into a dog



A kitten grows into a cat

Growth in animals

A baby grows up to be a boy. The boy grows into an adult man and then to an old man.



Baby



Boy



Adult



Old man

Growth in humans

A seed grows into a small plant, which further grows into a big plant and then into a big tree.



Seed



Small plant
Growth in plants



Big tree

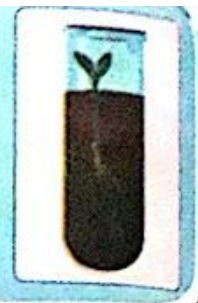


Let's Do

To do an activity to show the growth of a plant

Take some soil and water in the glass jar. Put a chickpea seed in it. Keep it in sunlight for two to three days, watch its growth.

Conclusion: You will notice that a small plant has grown out of the chickpea seed.



ALL LIVING THINGS NEED FOOD

All living things need food to live and grow. Animals get their food from plants and other animals. For example, a cow eats grass, a lion eats other animals and a monkey eats fruits. Green plants make their own food with the help of air, water and sunlight.

Do You Know

Plants make their own food by a process called photosynthesis. The green coloured matter called chlorophyll in plant's leaves enables this process to take place.



Monkey eating fruits



Plants make their own food

ALL LIVING THINGS BREATHE

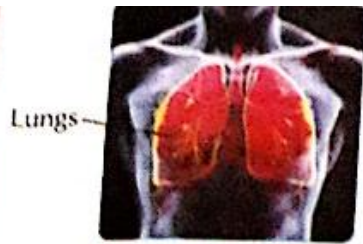
All living things need to breathe in order to stay alive. Humans and other animals that live on land breathe through lungs. Other animals have different organs for breathing. For example, fish breathe through gills, a frog breathes through its lungs on land, while in the

Do You Know

An average person breathes in around 11,000 litres of air every day.

water, it breathes through its moist skin. Plants also breathe. They breathe through the small pores present on their leaves. These pores are called **stomata**.

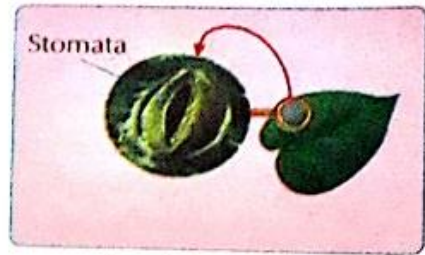




Breathing in humans



Breathing in frog



Breathing in plant through stomata

ALL LIVING THINGS FEEL

All living things respond to changes in the surroundings. Human beings and other animals have sense organs to feel changes around them. For example: We feel pain and pull away our hand on touching a hot object; plants can also feel changes around them but they do not have sense organs. For example: A plant always grows towards sunlight. Plants can also sense weather changes. Many plants shed their leaves in autumn and bear flowers in spring.



Let Us Do

To do an activity to check that plants can feel
Go to a park near your home. Look for a touch-me-not plant. Touch the leaves of the plant and watch it. The leaves will fold in a moment.



ALL LIVING THINGS REPRODUCE

All living things reproduce and give birth to young ones similar to themselves. For example, human beings give birth to babies, cats give birth to kittens, cows give birth to calves and hens lay eggs out of which chickens hatch. Plants also give rise to new plants from seeds, roots, stems or leaves.



A mother with her baby



A cat with its kitten



A cow with its calf

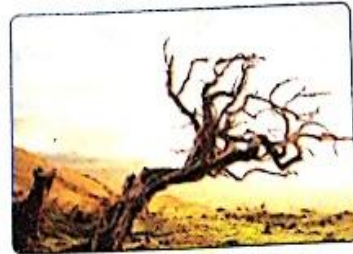


ALL LIVING THINGS DIE

All living things grow and finally die some day, i.e., every living thing has a fixed **lifespan**. The lifespan is different for each living being. For example, a banyan tree dies in about 300–400 years whereas a butterfly dies in one or two weeks.



Dead animal



Dead Banyan tree



Time to Answer



State True or False.

1. All living things reproduce.
2. Only animals die when they grow old.
3. Plant and animals can make their own food.
4. Different animals have different organs for breathing.

• NON-LIVING THINGS

Things which do not have life in them are called **non-living things**. Non-living things do not grow, breathe, move or reproduce. For example, mountain, table, cup, fan, etc.

DIFFERENCES BETWEEN LIVING AND NON-LIVING THINGS

Living things	Non-living things
<ul style="list-style-type: none">• Living things can move on their own.• Living things need food.• Living things grow.• Living things breathe.• Living things feel.• Living things reproduce.• Living things die.	<ul style="list-style-type: none">• Non-living things cannot move on their own.• Non-living things do not need food.• Non-living things do not grow.• Non-living things do not breathe.• Non-living things do not feel.• Non-living things do not reproduce.• Non-living things do not die.



lifespan: the time period for which a living thing lives



Time to Answer



Circle out the correct word to fill in the blanks.

1. Non-living things _____ (do/do not) have life.
2. Fan is a _____ (living/non-living) thing.
3. All living things _____ (die/make food).

• NATURAL AND MAN-MADE THINGS

All the things around us can also be grouped into natural and man-made things.

NATURAL THINGS

Things which are created by nature are called **natural things**. For example, animals, plants, earth, rivers, rocks, sun, moon, stars, etc. Natural things may be living or non-living.



Clouds



Sun



Earth

MAN-MADE THINGS

Things which are made by man are called **man-made things**. All man-made things are non-living. For example, television set, car, road, computer, building, aeroplane, etc.



Books



Table



Computer



Aeroplane





Time to Answer



Write (N) for natural things and (M) for man-made things under each picture.



Key Terms

Living things:

things that have life in them

Gills:

breathing organ found in fish

Stomata:

small pores in leaves of plant for breathing

Reproduce:

to produce young ones similar to oneself

Sense organs:

organs that allow us to sense changes around us

Non-living things:

things that do not have life in them

Natural things:

things created by nature

Man-made things:

things made by man



Now I Know



Class notes

- Living things have life in them.
- Human beings, plants and animals are living things.
- Living things move, grow, eat, feel, breathe, reproduce and finally die.
- Non-living things do not have life in them.
- Non-living things cannot move, grow, eat, breathe or reproduce.
- Things made by man are called man-made things.

I. Match the following:-

A

- (a) All man-made things are
- (b) Human beings, plants and animals are
- (c) We feel pain
- (d) All living things need
- (e) Natural thing

B

- 1. Living things
- 2. Non-living things
- 3. Sun
- 4. If someone pricks us
- 5. Food

II. Fill in the blanks:-

- 1. We breathe through _____.
- 2. A kitten grows into a _____.
- 3. A tadpole grows into a _____.
- 4. An adult man grows into _____.
- 5. Plants breathe through _____.
- 6. Fan is a _____ thing.
- 7. _____ flower always turns towards the sun.
- 8. A puppy grows into a _____.

III. Answer in one word:-

- 1. Name the breathing organ of human being.
- 2. What helps frog to breathe in the water?
- 3. The breathing organ found in fish is:

IV. Answer the following questions in short (in 15 to 20 words):-

- 1. What are man-made things? Give two examples.
- 2. Why do living things need food?
- 3. Which type of movement is shown by touch-me-not plant?
- 4. Do plants also feel? Give one example.
- 5. What are natural things? Give two examples.
- 6. Define photosynthesis.
- 7. What do you mean by reproduction?

V. Answer the following questions in details (30- 35 words):-

1. Write features of living things.
2. What are the difference between living things and non-living things?
3. Describe how plants show movements.
4. Give examples of reproduction in living things.

VI. Think and Answer:-

1. Can you breathe in water like fish? Why or why not?
2. Robots are also man-made, but they can move. Are they living thing or non-living thing? What made you to think it as living/ non-living thing?



How are Things Measured?



Do You Remember

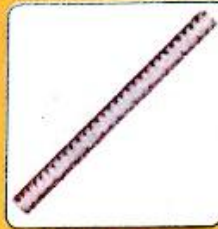
Unscramble the words and write the name of the items.



locke



ehmotertme



aslec

Let Us Learn About

- Measurement of length
- Measurement of volume
- Measurement of weight
- Measurement of time
- Measurement of temperature

We need to measure many things in our daily life, like length of a cloth, height, weight of objects, volume of liquid, time and temperature. All the measurements are done in different units. For example, we weigh vegetables in kilograms. We measure liquid in litres. There are different instruments for measuring each of these.



Let Us Do

Look at the pictures given below and write what is being measured.

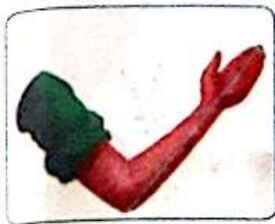






MEASUREMENT OF LENGTH

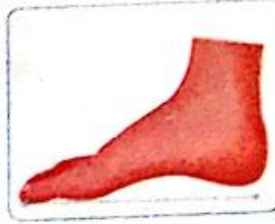
Length tells us how long a thing is. In early times, people used their body parts as units to measure the length of an object. They used handspan, footspan, **cubit** and **stride** to measure length of any thing.



Cubit



Handspan



Footspan



Stride



Let Us Do

Ask your mother to measure the length of a window using her handspan. Now, you measure the same window using your handspan. Note down the number of handspans counted by you and your mother. You will find a difference in the measurement because different handspans have different lengths.

To get an accurate measurement, we have fixed units for measuring things. Metre is the **unit** used for measuring lengths. Smaller lengths are measured in centimetres and millimetres.

- Metre is written as **m**.
- Centimetre is written as **cm**. ($100 \text{ cm} = 1 \text{ m}$)
- Millimetre is written as **mm**. ($10 \text{ mm} = 1 \text{ cm}$)
- A ruler measures length in centimetres, millimetres and inches.

For example, a ruler shown here is 15 cm long.



Do You Know

The linen bandages that were used to wrap Egyptian mummies averaged 1,000 yards in length (i.e. 914.4 m).



A Ruler

cubit: an ancient linear unit based on the length of the forearm
stride: to walk with long steps to measure the length
unit: fixed measures of finding quantity of a thing



Measure the lengths of your objects using a centimetre ruler and fill in the blanks.

- (a) My pencil box is _____ cm long.
- (b) My book is _____ cm long.
- (c) My pencil is _____ cm long.

You might have seen a tailor measuring cloth using a measuring tape. A **measuring tape** measures length in metres and centimetres.

Very long distances which are travelled by car, bus, scooter or cycle are measured in kilometres written as km. (1,000 m = 1 km).



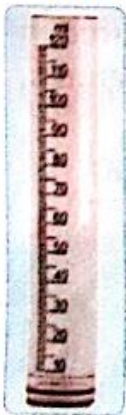
A tailor measuring cloth



Complete the following sentences.

- 1. A tailor uses _____ to measure the _____ of a cloth.
- 2. Very long distances can be measured in _____.
- 3. _____ is the shortest unit to measure length.

• MEASUREMENT OF VOLUME



Measuring cylinder

The space occupied by any substance or container is called **volume**.

Litre is commonly used as the unit to measure volume. Smaller amounts of liquid are measured in millilitres. Litre is written as **L** and millilitre is written as **ml**. (1 l = 1,000 ml)

We use special instruments like measuring cylinders marked in millilitres and litres to measure volume of liquids. Liquid is poured into these jars and volume is measured by reading the markings on them.

You might have seen your milkman measuring the milk using special mug-like vessels while giving you milk.



Milkman measuring milk

Time to Answer

Circle the container which can hold more volume of liquid than the other in the given sets.

A



B



MEASUREMENT OF WEIGHT

Weight tells us how heavy or light an object is. Weight is measured in grams and kilograms. Kilogram is written as **kg** and gram is written as **g**. (1,000 g = 1 kg) We use a weighing balance or a weighing machine to measure weight.



Weighing machine



Weighing balance

Let Us Do

When your mother buys vegetables from a grocer, observe the weighing balance. The grocer puts the vegetables in one pan and balances it with weights on the other pan. Ask him about the technique used in it.

Light weights are measured in milligrams and grams (1,000 mg = 1g). Heavy weights are measured in kilograms. For example, gold is measured in milligrams and grams, while sugar, rice, tea, etc., are measured in kilograms.

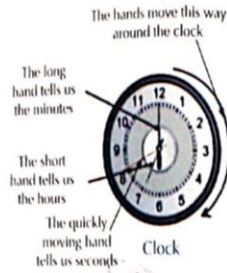
Time to Answer

Write the units in which the following will be measured.



MEASUREMENT OF TIME

Time is measured by using a clock or a watch. We measure time in seconds, minutes and hours. In earlier times, humans used to measure time by the movement of sun. They used sundials or sand clock. There are 24 hours in a day. Each hour is made of 60 minutes and each minute has 60 seconds.



Many places use daylight saving (time putting clocks forward an hour) for longer daylight in evening.



Draw the hour and minute hands of clock in the pictures given below.



(a) At what time do you get up?



(b) At what time do you eat breakfast?



(c) At what time do you go to school?



(d) At what time do you go to bed?

MEASUREMENT OF TEMPERATURE

- Temperature is the measure of how hot or cold body/object is. We measure the temperature of body using a **thermometer**.
- Temperature is measured in degree Celsius ($^{\circ}\text{C}$) or degree Fahrenheit ($^{\circ}\text{F}$).
- Our normal body temperature is 37°C or 98.6°F .
- A room thermometer measures temperature from -40°C to 50°C .



A doctor reading temperature



Clinical thermometer



Room thermometer



Write True or False for the following.

1. We measure our temperature by using room thermometer.
2. Temperature measures the hotness or coldness of a body.
3. Degree Celsius is the unit of temperature.



- Length:** it tells us how long a thing is
- Volume:** space occupied by a substance
- Weight:** it tells us how heavy or light an object is
- Temperature:** it tells us how hot or cold a body or object is

I. Match the following:-

A

- a) Clock
- b) Thermometer
- c) Ruler
- d) Weighing machine
- e) Measuring cylinder

B

1. To measure length
2. To measure weight
3. To measure liquid
4. To measure temperature
5. To measure time

II. Fill in the blanks:-

- a) We use litres and _____ to measure volume.
- b) A _____ is used to measure liquids.
- c) In early time people used _____ to measure lengths.
- d) Thermometer is used to measure _____.
- e) One minute is equal to _____ seconds.
- f) Very long distances can be measured in _____.
- g) _____ measures length in meters and centimetres.
- h) _____ is the shortest unit to measure length.

III. Answer in one word:-

- a) Name any one unit for measuring temperature.
- b) Which instrument is used to measure liquids?
- c) For measuring cloth, tailor uses which instrument?

IV. Answer the following questions in short (15- 20 words):-

- a) What is the temperature of a normal human body?
- b) Name the body parts which were used to measure lengths in early days.
- c) What is used to measure weight?
- d) What is temperature?
- e) What are the different units used to measure length?
- f) A room thermometer can measure temperature in which range?
- g) How is time measured?

V. Answer the following questions in detail (30- 35 words):-

- a) How are liquids measured?
- b) Define weight. What unit do we use to measure the weight of an object?
- c) How do we measure time? In earlier times how humans used to measure time?
Write the units of time.
- d) How people in early times measured length and how do we measure now?

VI. Think and Answer:-

- a) You have a 1-litre capacity mug. How will you measure 12 litres of water to be kept separately for drinking by using that mug?
- b) Global warming heat up the surface of earth and we feel hotter however, during this lockdown we're not feeling hotter than the last year time. Which activities you think had made temperature of earth surface to cool down a bit?

-----:OOOO:-----