

We are surrounded by many cattle, birds, insects and trees. Have you observed them keenly any time ? Let us observe them keenly.



Write down the names of different things, cattle, birds, insects, plants, etc Found outside your class-room / school. Tick ✓ mark in front of the characters found in them :

Name	Do they take food ?	Do they breathe ?	Do they show movement ?	Do they move themselves from one place to another ? (Show locomotion ?)

Those, found taking the food or showing locomotion or showing movement, can be said to be a living one.

Observe the table and prepare a list of living organisms.

If characters shown by living organism are not found in any one, then they are considered as non-living things. Observe the table and prepare a list of non-living things.

Are there any name of plants in the list of living organisms prepared by you ? Illustrate.



Let us do an activity to show that plants possess characters of living organisms.

What is required ? Lime, water, transparent plastic bag, thread, cup/dish

What to do ?

- ☞ Take one dish/cup.
- ☞ Take some water in it.
- ☞ Dissolve some lime in that water. Let that mixture settle down for some time.
- ☞ Take supernatant of that water in another jar.
- What is its colour ? Note down.

- Take some lime water in a plastic bag.
- Tie that bag with any plant as shown in the diagram.
- Observe the water in that bag after one hour.



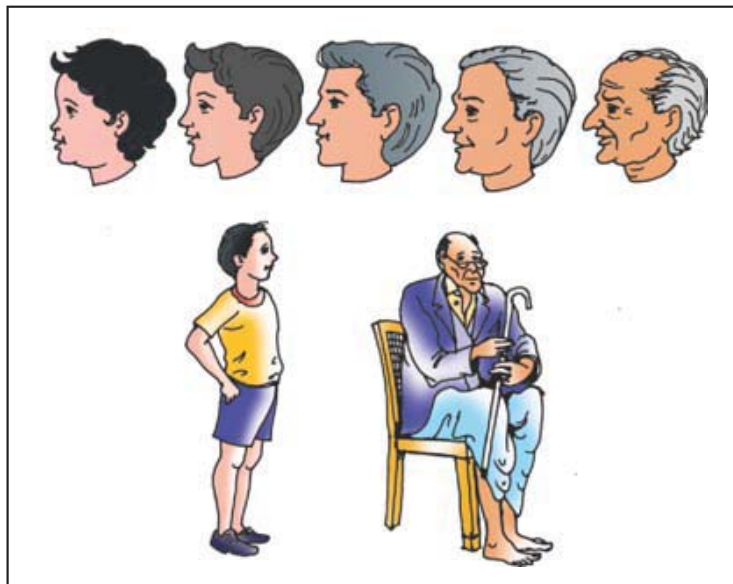
Blow some air with the help of a straw in the rest of lime water. Do you find any colour change ? Note down that here.



Why does the water show this type of colour change ? Know it with the help of your teacher and try to get answers of the following questions.

- Do plants respire ? Which organ helps them in that process ?

Let us know the other characters of living organisms.



Observe the given photograph and note down the changes found in the parts of body of child.

Thus, each and every organism shows growth. Just like a child becomes youth.



Which are the other organisms show growth ?

- Oh, this balloon also becomes big. Is it a living organism ?



- How do you come to know that a spine has hurt your feet ?

- Why do you wear woolen clothes in winter ?



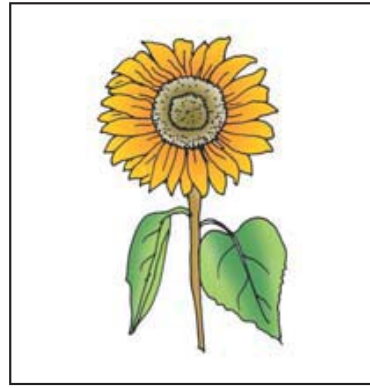
Do cow/buffalo/dog feel anything while they are bitten by such spine ? How do they react while such things happen to them ?

- Does the wall feel such emotions while we push a nail into it ?

Pain, hunger, laugh, cry are the senses. All organisms feel senses. To experience heat or cold are one type of senses. Note down your other senses.



**Plant of *Mimosa*
(Touch me not)**



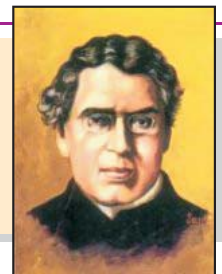
Sunflower

Plants also feel this type of sensation. Touch the leaves of *Mimosa* it is available in your surroundings.

- Observe the leaves of trees in the morning and at the night. You will find that the leaves of the trees are more shaded at night compared to that in the morning. Some flowers bloom at night due to sensation.
- Which flowers bloom at night ? List their names here.



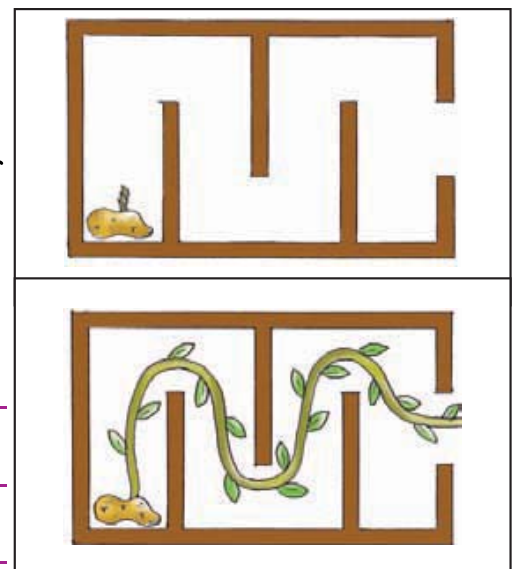
An Indian scientist Jagdish Chandra Bose had discovered that music has effect on the plants. Plants grow better in the presence of music.



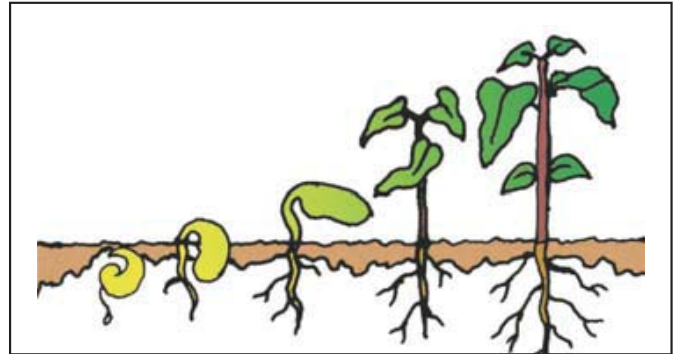
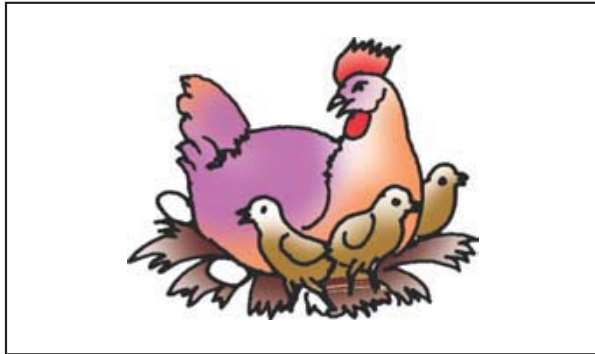
What is required ? Germinated potato, box, card board, scissors, glue

What to do ?

- ☞ Take one box. Put down a germinated potato in it.
- ☞ Make hole in the box and put down hurdles of card-board in the box as shown in the diagram.
- ☞ Observe the potato after 10 days and note down your observation here.



What will you do if you want to grow a mango tree ?



Thus, each organism is capable of producing new organism of its own kind.



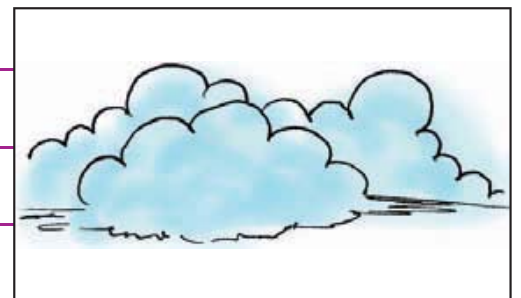
Does any bicycle reproduce another bicycle ?



- Thus, organism show specific characters. List out the characters of living organisms.











Now, tell that whether the cloud moving in the sky is living or non-living ?
Why ?





Q.1 Tell about the similarities and differences of following things and note down them :

Pictures		Similarities	Differences
			
			
			
			

Play this game with your friends.

Guess - What

Write down names of seven living and non-living things on the blackboard.

- Any one of you take a turn and imagine any name written on the blackboard.
- Rest of the friends will ask questions as follows : The person whose turn is there, will answer in yes/no.
e.g. (1) Can it walk ? (2) Can it breathe ?
- You have to guess the name on account of the answers given by him/her.

Note : Is it a living organism ? This type of questions can't be asked. It is better to guess with the help of less number of questions. Each member will have his or her turn.