What's alive? What's not?

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Activity 1: Living and non-living things

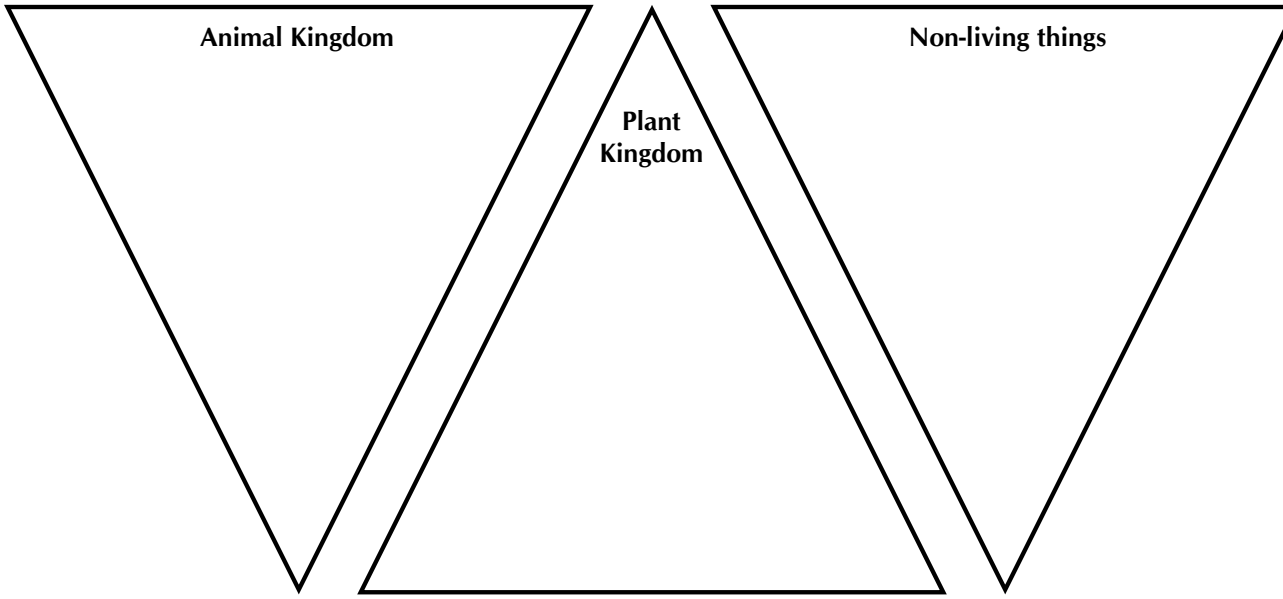
Have you seen a puppy turning into a tall dog and then giving birth to another puppy? Or a tree in your surroundings that produces flowers or fruits? These are important features of living things. But, when you use your pencil, it becomes shorter and shorter and finally becomes so small that you cannot use it anymore. Does your pencil grow or produce another new pencil? It doesn't because a pencil is a non-living object.

➢ *Now let us do a quick revision activity. Below are a few pictures and a table. Fill up the table with your answers to say whether they are living or non-living?*

	Can it breathe?	Can it grow?	Can it produce young ones?	Living or non-living?
Tortoise				
Bell				
Pizza slice				
Flower				
Worm				
Butterfly				
Candle				
Mushroom				
Kite				
Tree				
Ice-cream				
Mobile phone				

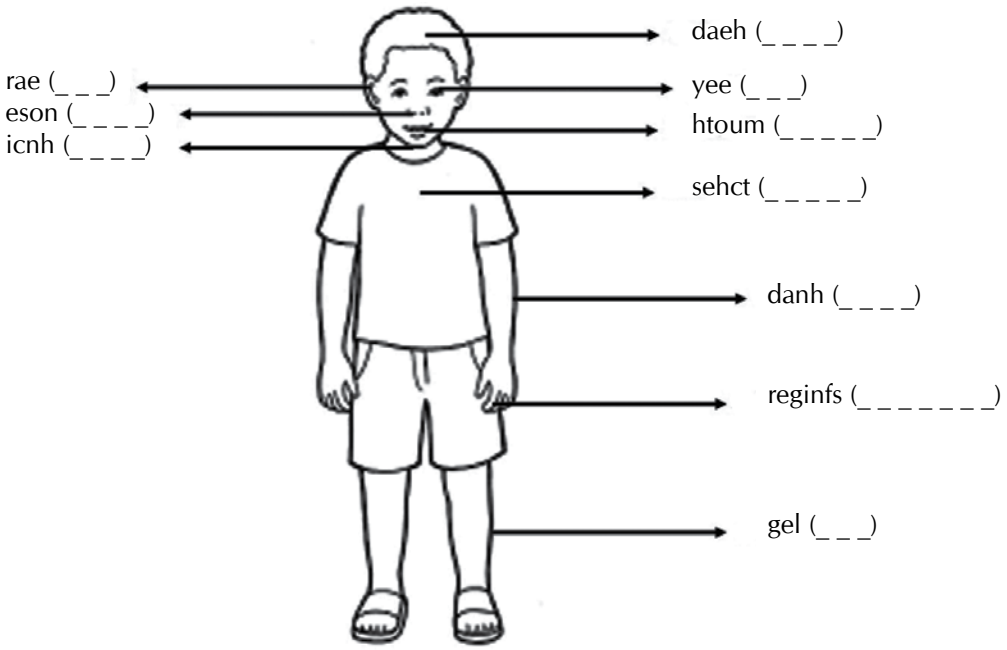
➢ *Divide the following into their correct groups.*

Robot	Apple	Burger	Cactus	Sunflower	Rock
Shoe	Plate	Pan	Ant	Cat	Squirrel
Peacock	Pig	Strawberry	Bread	Milk	Spoon
Water	Car	Camel	Cloud	Pineapple	Carrot

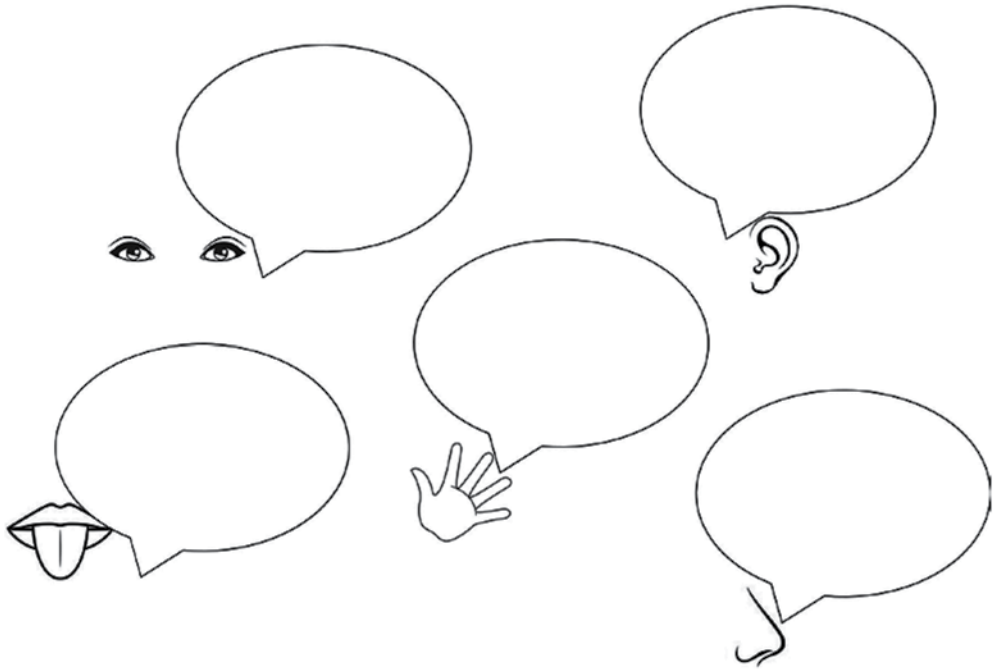


Activity 2: Our body

➢ *The labels of the body parts in the picture below are jumbled. Write the correct form of the words in the space provided.*



➢ *Write down the appropriate sentences in the callouts near the sense organs.*

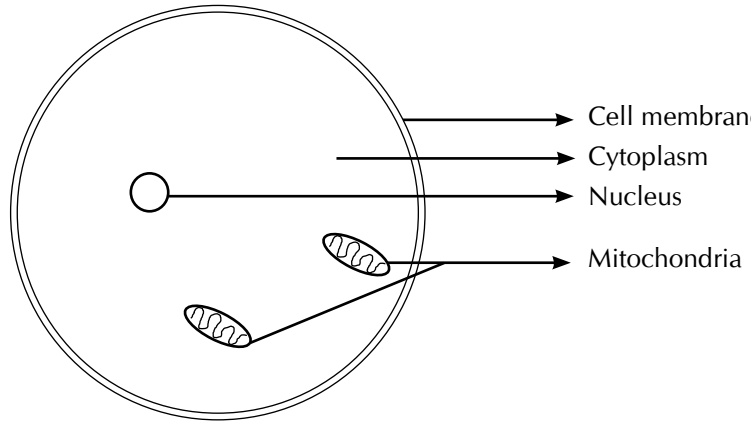


Feel of a pin prick	Smell of a rose	Feel of cold winter	Barking dog
Sound of firecrackers	Taste of chillies	Taste of salt	Tall mountains
Setting sun	View of a garden	Feel of a hot spoon	Smell of garbage bin

Activity 3: What are cells? Do cells grow?

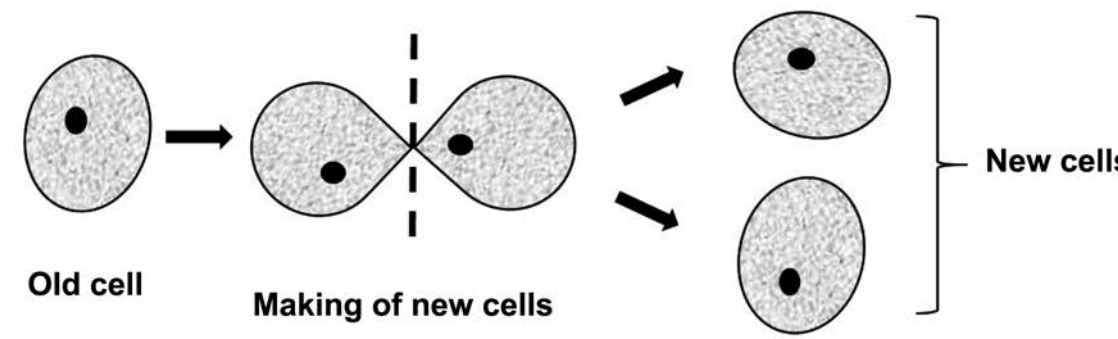
Living things are made up of cells. Our body has thousands of cells. They have tiny parts inside them that do different functions.

➢ *Colour the cell parts based on the functions given in the table below.*



Function	Colour
Powerhouse of the cell-production of energy	red
Brain of the cell-control of cell's activities	green
Jelly-like material filled inside the cell	yellow
Protective covering of the cell	blue

Do cells grow? The next time you hurt your skin, observe what happens to your wound. Does it remain that way forever? No, it gets a new skin in place of the damaged one, right? Our body can make new cells from old ones.

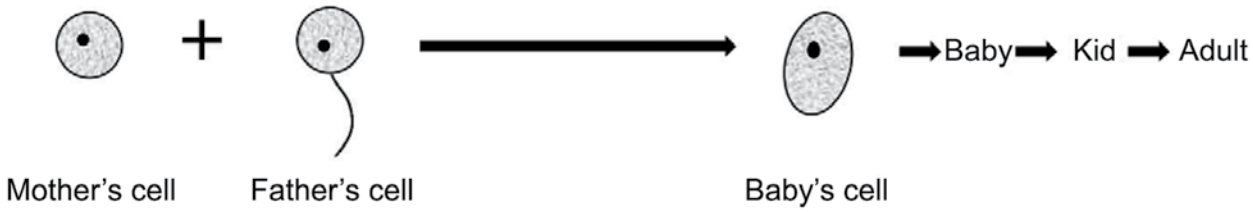


➢ *Based on this knowledge, think of what will be the total number of new cells formed when three cells divide at the same time? Can you support your answer with the help of a drawing in the box provided below? Colour the old cells red and the new cells blue.*

Activity 4: Why do we look like our parents?

Did someone ever tell you that your eyes look like your father's or you get dimples like your mother? That is because we are born from our mother's and father's cells.

This is what happens:



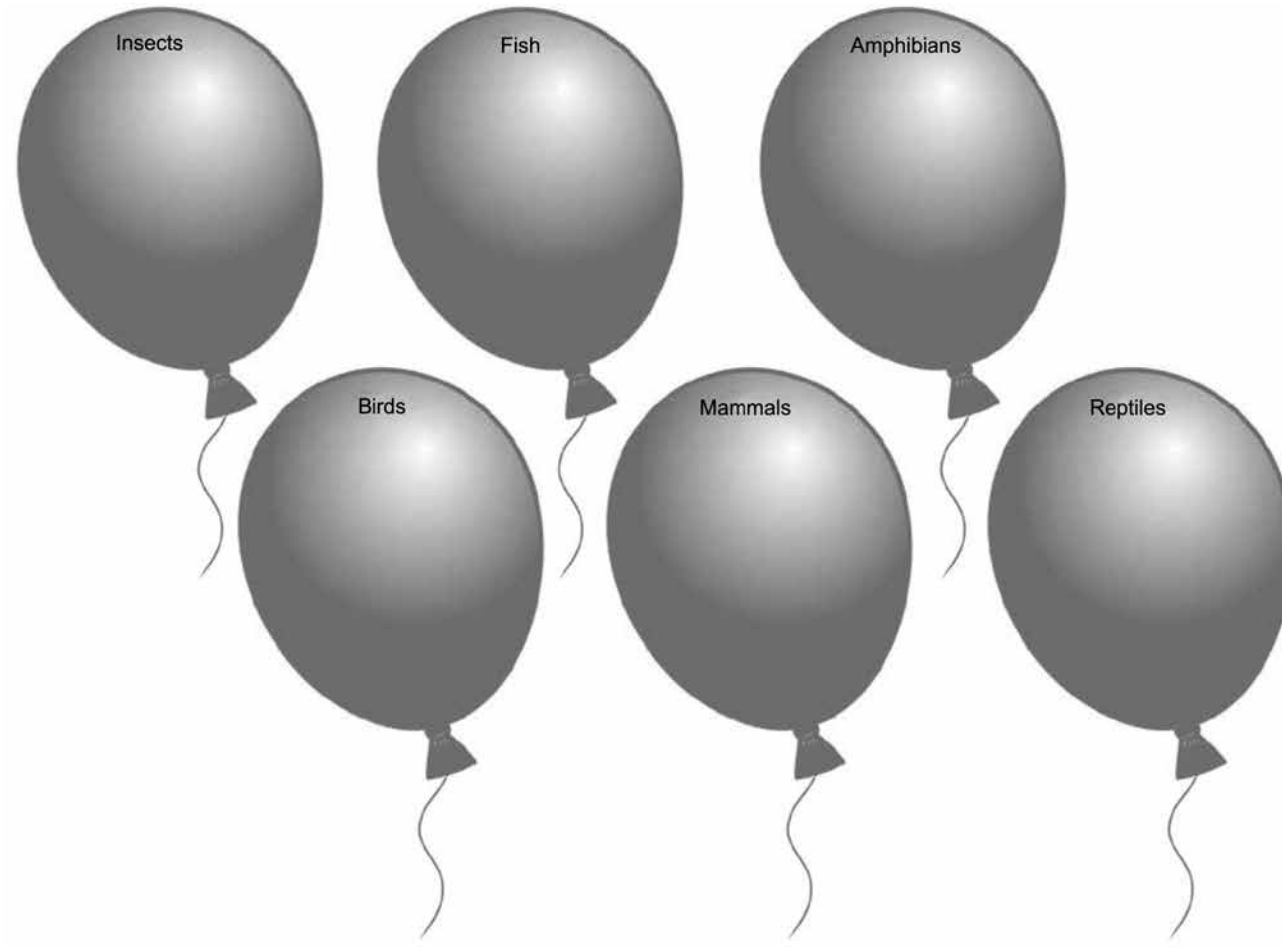
➢ *Even though we look somewhat like our parents, we also have a few body features that make us unique. Observe yourself and your family members and fill up the chart below to find out how similar you are to them!*

Feature	You	Mom	Dad	Brother	Sister
Height *(tall/short/average)*					
Face shape *(round/oval/square)*					
Cheek dimples *(Yes/No)*					
Hair *(curly/straight/wavy)*					
Hair colour *(black/brown/golden)*					
Eye colour *(black/brown/shades of green/shades of blue)*					
Skin colour *(dark/light brown/fair/ very fair)*					

Activity 5: Animals in our surroundings

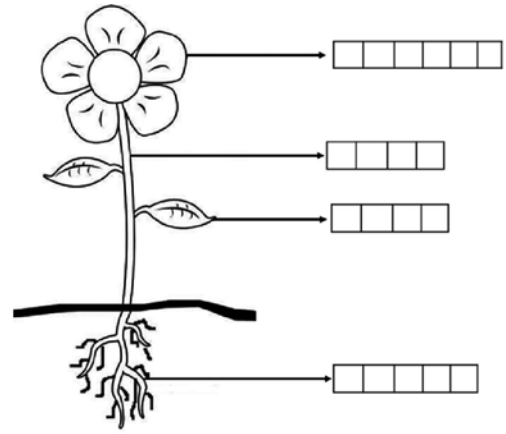
➢ *Write down the names of the following animals in the balloons they belong to.*

Owl	Salmon	Ostrich	Human beings	Stingray	Turtle
Lizard	Honey bee	Sparrow	Cockroach	Toad	Horse
Shark	Frog	Dinosaur	Kangaroo	Deer	Crow
Catfish	Parrot	Bat	Housefly	Bear	Butterfly



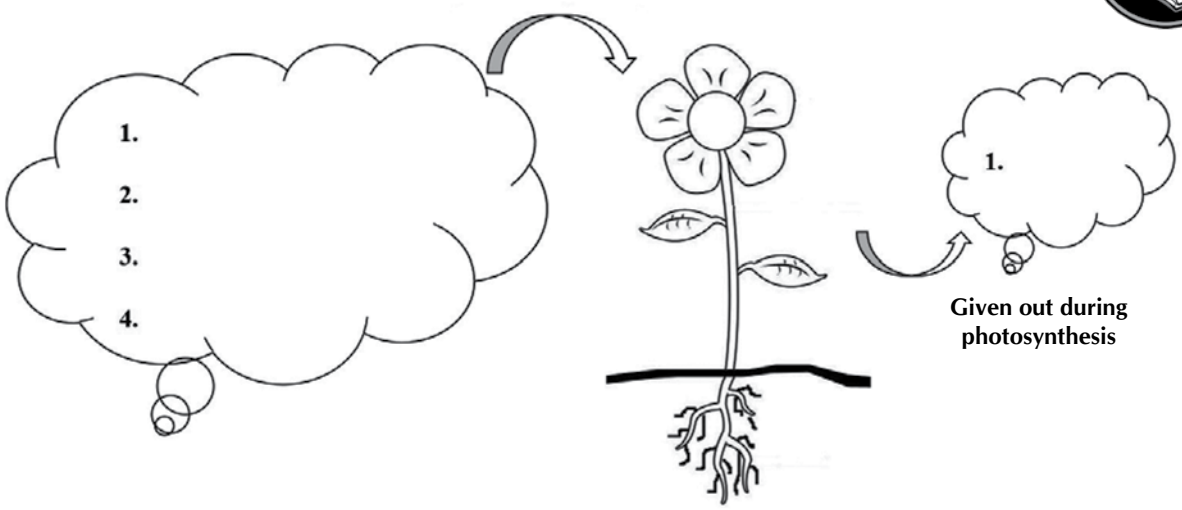
Activity 6: Plants in our surroundings

➢ *Label the parts of the plant in the picture.*



➢ *Plants can prepare their own food by a process called photosynthesis. Write four things that plants need for photosynthesis. Also write what is given out by plants during photosynthesis.*

Required for photosynthesis



➢ *We eat different parts of plants like fruits, roots, stems, leaves and seeds. Fill in the blanks with correct choices.*

1. Potato is a _____ (tuber/fruit).
2. Radish and carrots are _____ (stems/roots).
3. Peas are _____ (seeds/fruits).
4. Rose and jasmine are _____ (flowers/fruits).
5. Wheat and maize are _____ (roots/seeds).
6. Cauliflower is a _____ (fruit/flower).
7. Tomato and pumpkin are _____ (fruits/roots).
8. Spinach and cabbage are _____ (flowers/leaves).

Activity 7: My favourite animal and plant

➢ *Let us make an information sheet of your favourite animal. Collect as much information as you can. You can then fill up the information in the spaces below.*

My favourite animal

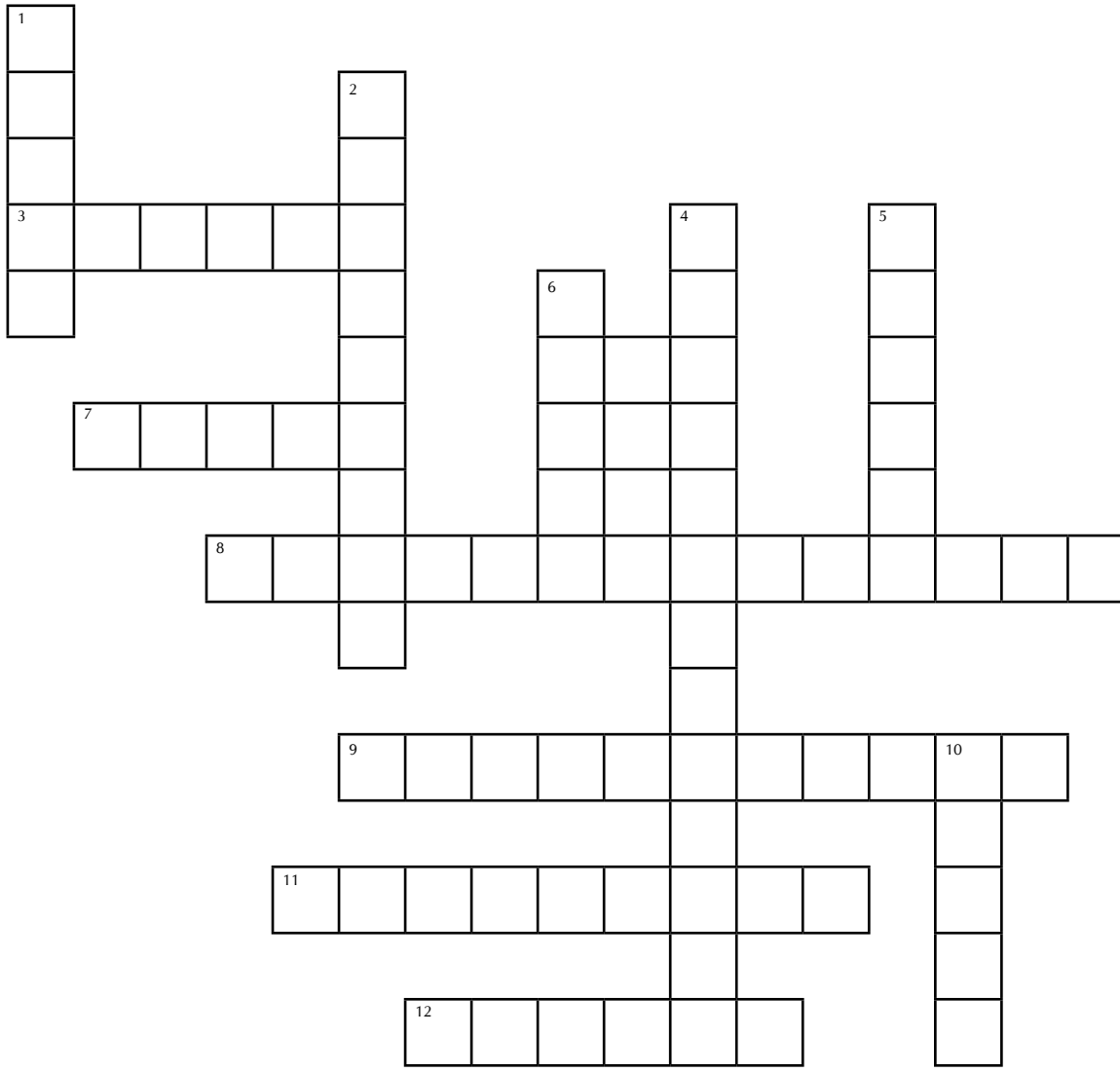
Name	Animal picture (draw or paste picture)
Where does it live?	
What does it eat?	
How big is it? How does it look?	
Why do you like it? What do you find most interesting about it?	

➢ *Now let us make an information sheet of your favourite plant. Collect as much information as you can. You can then fill up the information in the spaces below.*

My favourite plant

Name	Plant picture (draw or paste picture)
Where does it grow?	
In which season does it grow?	
How big does it grow? Does it produce fruits or flowers or vegetables?	
Why do you like it? What do you find most interesting about it?	

Activity 8: Revision through crossword puzzle



Clues

Across:

3. Plants can grow and reproduce; hence they are _____ things.
7. The _____ in our body pumps blood to all the organs.
8. Plants make their food by a process called _____.
9. Plants need light, water, carbon dioxide and _____ for photosynthesis.
11. A robot cannot grow or reproduce, hence is an example of a _____ thing.
12. We need _____ for breathing.

Down:

1. Living things are made up of _____.
2. Our stomach does the function of _____ of food.
4. During breathing, we take in oxygen and give out _____.
5. _____ is the sense organ that helps us taste different foods.
6. _____ absorb nutrients and minerals from the soil which are necessary for the proper growth of plants.
10. _____ in our body take in oxygen from the atmosphere and help us during breathing.

Developed by Dr. Leena Thorat. The author is an Early Career Scientist working at the Department of Zoology, SP Pune University (formerly, the University of Pune). She is deeply fond of writing popular articles and delivering talks to young students. She can be reached at <leenathorat@gmail.com>.

Answers
Across: 3) Living 7) Heart 8) Photosynthesis 9) Chlorophyll 11) Non living 12) Oxygen
Down: 1) Cells 2) Digestion 4) Carbon dioxide 5) Tongue 6) Roots 10) Lungs