

DISCUSS

Q1. What things are soaked before cooking in your house? Why?

Answer: Here are few items which we soak before cooking are soya bean, pulses, chana, rajma etc. These are soaked because it softens and makes it easier for grinding.

Q2. What things do you eat after sprouting? How are they sprouted? How much time does it take?

Answer: After sprouting we can eat items like chana, moong etc. We can sprout them by soaking it in water and then by wrapping it in wet cloth so that they get proper water and air. Chana takes around 36-48 hours in sprouting and moong takes around 24-36 hours.

Q3. Has the doctor or someone you know ever told you to eat sprouts? Why?

Answer: Yes, doctor has advised me to eat sprouts so that it is good for health.

DO THIS AND FIND OUT

Q1. Do you remember that in Class IV you did an activity with seeds? Now try another one.

- Take some chana and three bowls.
- Put five chana in the first bowl and fill it up with water.
- Put a damp piece of cloth or some cotton wool in the second bowl. Now keep the same number of chanas in it. Make sure that the cotton wool or cloth remains wet.
- Put the same number of chanas in the third bowl. Do not put anything else in it. Cover all the three bowls.

	Bowl 1	Bowl 2	Bowl 3
Are the seeds getting air?	No	Yes	Yes
Are the seeds getting water?	Yes	Yes	No
What changes did you see?	Chanas have swelled	Chanas have sprouted	No change
Have the seeds sprouted?	No	Yes	No

TELL AND WRITE

Q1. In which bowl did the seeds sprout? What difference did you see between this bowl and the other bowls?

Answer: Seeds sprouted only in bowl 2. We noticed that in bowl 2 it seeds got sufficient air and water so it sprouted. In the other two bowls, bowl 1 got only water and bowl 3 got no air nor water so it did not sprout.

Q2. Why did Gopal's mother tie the chana in a damp cloth?

Answer: Gopal's mother tied the chana in a damp cloth so that seeds could get proper air and water to sprout.

WRITE

Q1. Name of the seed: _____

The date on which you planted them: _____

The day you observe something coming out of the soil, start filling the table:

Date	Height of plant (in cm)	Number of leaves seen	Any other change

Answer:

Name of the seed: Mustard (sarson)

The date on which you planted them: 2nd December, 2019

The day you observe something coming out of the soil, start filling the table:

Date	Height of plant (in cm)	Number of leaves seen	Any other change
10 th december	1cm	2	Nil
11 th december	1.5cm	3	Nil
12 th december	2.5cm	4	Stem has become thicker
14 th december	4cm	6	Stem has become even more thicker

FIND OUT

Q1. How long did it take for the plant to come out from the soil?

Answer: The Plant took almost a week to come out of the soil.

Q2. What was the difference in the height of the plant on the first and second day?

Answer: The height of the plant on the first day to the second day has increased by half a centimetre.

Q3. On which day did the height of the plant increase the most?

Answer: The height of the plant increased the most on the third day.

Q4. Did new leaves come out of the plant every day?

Answer: Yes, new leaves came out of the plant every day.

Q5. Was there any change in the stem of the plant?

Answer: Yes, the stem became thicker and stronger each day passed by.

DISCUSS

Q1. Which seeds took the most number of days for the stem to come out of the soil?

Answer: Seeds of sesame took the most number of days for the stem to come out of the soil.

Q2. Which seeds took the least days to come out of the soil?

Answer: Seeds of mustard took the least days to come out of the soil.

Q3. Which seeds did not grow at all? Why?

Answer: Seeds require both water and air. If both are not present then no seed will develop.

Q4. Did anyone's plant dry up or turn yellow? Why did this happen?

Answer: Yes, few students' plant dried up or turned yellow since there was no proper water or air.

Q5. What would happen if the plants do not get water?

Answer: If the plants did not get water then it will get dried up.

STRAIGHT FROM YOUR HEART

Q1. What is inside the seed?

Answer: Inside the seeds there exists a cotyledons and embryo.

Q2. How does a big plant grow from a tiny seed?

Answer: The seeds by absorbing water and nutrients from the soil, grows to be a big plant.

THINK AND IMAGINE

Q1. What would happen if plants could walk? Draw a picture.

Answer: If plants could walk then the plant would produce nothing like for eating, shelter and a major thing oxygen.




FIND OUT

Q1. Do some plants grow without seeds?







Answer: Yes, there are few plants which grow without seeds.

SO MANY SEEDS

Q1. How many types of seeds can you collect? Where will you find them? Each of you should try to collect as many different types of seeds as you can. After that, put all the seed collections together. Now observe these seeds carefully – their shapes, sizes, colors, textures (smooth or rough). Make a seed chart to put up in the class. You can start with a table like this.

Name of the seed	Color	Shape (draw)	Texture
Rajma	Reddish brown		Smooth

Answer:

Name of the seed	Color	Shape (draw)	Texture
Rajma	Reddish brown		Smooth
Papaya	Black		Rough
Apple	Brown		Soft
Musk melon	white		Soft
Mango	Whitish yellow		Rough
Lady's finger	Green		Soft

Chana	Brown		Soft
Moong	Green		Soft
Mustard	Green black or yellow		Soft
Aniseed	Green		Soft
Cumin	Brown		Soft

THINK

Q1. Did you keep aniseed (saunf) and cumin (jeera) in your list?

Answer: Yes, I have taken aniseed and cumin seed in the list.

Q2. Which was the smallest seed and which was the biggest seed in your collection?

Answer: The biggest seed which I took was mango seed and the smallest seed among those were the cumin seeds.

MAKE LIST OF

Q1. Seeds that are used as spices in your home.

Answer: Seeds that are used as spices at home are mustard, cumin, aniseed etc.

Q2. Seeds of vegetables.

Answer: Seeds of vegetables are tomato, lady's finger, brinjal etc.

Q3. Seeds of fruits.

Answer: Seeds of fruits are orange, apple, grapes etc.

Q4. Light seeds (check by blowing them).

Answer: Light seeds are cumin, aniseed etc.

Q5. Seeds which are flat.

Answer: Seeds which are flat are cumin, aniseed, sesame, rajma etc.

Q6. Make more groups. How many groups of seeds did you make?

Answer: More groups of seeds are edible seeds, small seeds, big seeds, seeds used as spices, heavy seeds, light weight seeds, seeds which produce oil. I could make 7 groups.

Q7. Do you know any games that you can play with seeds? Discuss with your friends.

Answer: Yes, using seeds we play games. Tamarind seed cut into halves, children play games, using mango seed children make flute etc.

Q8. Have you ever seen any seed that can fly?

Answer: Yes, I have seen seeds which fly.

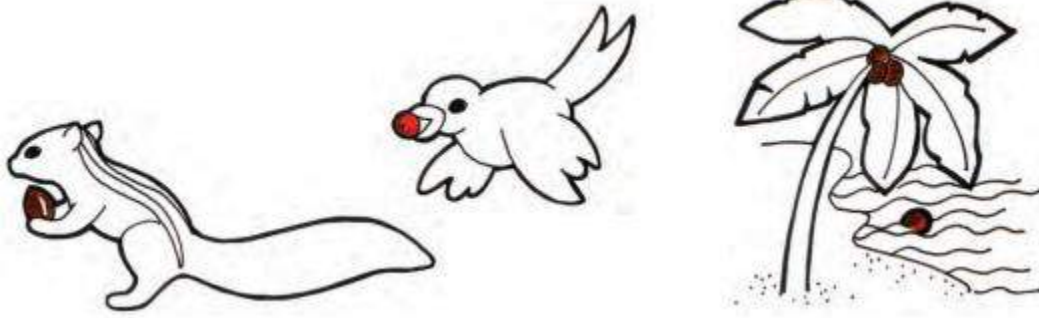
Q9. What is it called in your area?

Answer: It is called as budhiya ke baal (old woman's hair).

Q10. Look at your seed collection. Guess how many of those could have travelled by flying

Answer: Some of them could have travelled by flying like aniseed and cumin seed.

Q11. Look at the pictures given below and guess how the seeds travel and reach different places



Answer: In the first picture we can see that squirrel is carrying the seed, in the second picture we can see that parrot carrying the seed which indicate that the seeds are travelling by means of animals. In the third picture we can see that the seed is floating on the water. Which indicate that the seed is carried away by the water.

Q12. Some plants spread their seeds over long distances. When the soya bean pods are ripe, they burst and the seeds are thrown out. Have you ever heard their sound?

Answer: No, I have not anything as such.

Q13. Think what would happen, if seeds did not spread and remained at one place only.

Answer: If seeds did not spread and remained at one place only then they would fall under its parent tree itself so that it would not get enough sunlight, water and hence the plant will not grow properly and they might die.

Q14. Make a list of the different ways by which seeds are spread.

Answer: Seeds spread by water, wind, animals, birds, humans etc.

Q15. What all was grown in India long ago? Were mangoes and bananas grown here? What came from other countries? Imagine food without potatoes or tomatoes!

Answer: Long ago in India, spinach, radish, mango, orange etc. were grown. Yes, mangoes and bananas are grown here. From other countries we got items like tomato, potato, coffee bean, cabbage etc. It would be difficult to cook food without potatoes and tomatoes and it would be tasteless.

WHAT WE HAVE LEARNT

Q1. Reena has drawn this picture of the seed sprouted by her. What do you think the seeds need for sprouting? Write in your own words. How would Reena's seeds look if they did not get the things needed. Show by drawing a picture.



Answer: Every seed needs water and air for sprouting. If there is no water for the seed, the seed remains the same. And if there is water but no air then the seed doesn't sprout and would not grow but it would just swell up.

Q2. How do seeds spread to far off places? Write in your own words.

Answer: There are means for the seeds to travel. To farer places the seeds would be carried by the birds, water, animals, air. Birds, after eating they throw, lighter seeds get carried away by air and hence spread out.

