As per NEP 2020

Science

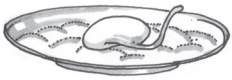
Class 4

Activities

A Grow seeds.

Experiential Learning, Scientific Temper

You need a few soaked gram or bean seeds, cotton wool, a shallow plate and an earthen pot with soil.



1. Line the plate with cotton wool and moisten it. Keep one seed on the wet cotton wool. Always keep the cotton wool moist.
2. Place one seed on the damp soil in the pot. Cover it with a little more soil.

   Leave both in a well-lit area in your room.

   Watch for a week and note the changes.

Which seed shows better growth? Can you say why?

_____

_____

B Who are we?

Critical Thinking

Some animals reproduce by giving birth to babies and some lay eggs. Name us.

1. My baby looks just like me. It lives in the pocket on my tummy till it grows big.

   I am a _____

2. I sit on my eggs to warm them. My babies crack the walls of the eggs and come out. They cluck around me.

   I am a _____

3. I live in oceans. I have huge babies, each one weighing about two tons at birth. They gain weight every day.

   I am a _____

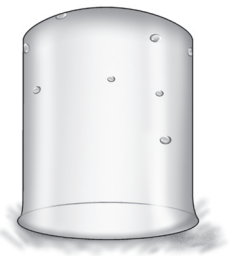
4. I lay hundreds of eggs in standing water. I suck the blood of human beings and spread diseases.

   I am a _____

C Water cycle in a jar!

Experiential Learning

On a sunny day, invert a glass jar on the grass in a lawn or a park. The water from the grass will evaporate into the jar.



Then the vapour will condense back to water drops. You will see water drops running down the sides of the jar and back to the ground.

Now fill in the blanks.

1. Water turning into water vapour is called

   _____

2. Water vapour turning into water is called

   _____

D Compare the rate of evaporation.

Experiential Learning

Pour an equal amount of water in two saucers of the same size. Place one saucer in a shady area and the other under direct sunlight. Which saucer loses water faster? Write down your observation.

Observation: _____

_____

_____

E Read the clues. Solve the word puzzle.

Conceptual Understanding, Problem Solving

ACROSS

1 We get this natural fibre from an animal.

3 Dried neem leaves or mothballs are kept between the folds of silk and woollen clothes to keep these away.

4 This is made of waterproof material and protects us from rain.

7 We must always wear _____ clothes.

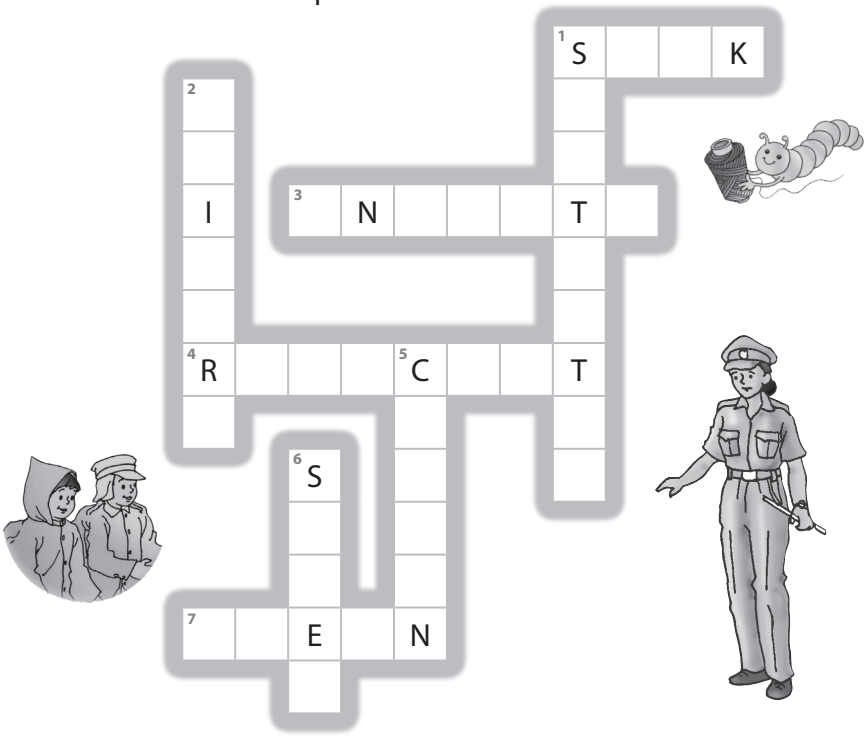
DOWN

1 Polyester and rayon are examples of this type of fibre.

2 These are special clothes worn to work by soldiers, the police, and many others.

5 In summer we wear clothes made of this material.

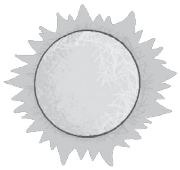
6 We wear this to protect our feet.



F Read the clues. Find and circle the answers in the wordsearch. **Conceptual Understanding, Problem Solving**

O	A	R	A	P	S	O	L	S	N	U	S	M
E	S	E	A	S	O	N	S	O	N	T	A	R
I	I	V	E	H	T	J	U	P	I	T	E	R
L	I	O	A	E	N	H	N	U	I	A	I	O
N	T	L	O	H	N	A	I	O	U	A	O	T
O	L	U	T	U	L	P	E	A	L	T	S	A
S	O	T	I	E	H	V	I	P	T	O	E	T
E	A	I	E	A	S	U	N	U	T	I	N	I
E	O	O	T	R	M	O	O	N	T	S	E	O
C	O	N	S	T	E	L	L	A	T	I	O	N
S	P	S	T	H	T	O	U	S	Y	N	T	S

1. A group of stars
2. The star nearest to the earth
3. The planet on which we live
4. The natural satellite of the earth
5. The largest planet in the solar system
6. The movement of the earth on its axis
7. The movement of the earth around the sun
8. The revolution of the earth causes this phenomenon

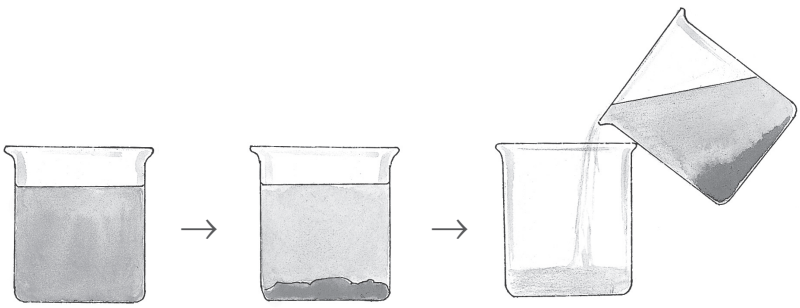


G Fill in the missing letters to complete the series. Critical Thinking

1. SUN : S T A R : : SATURN : PLANET
2. TITAN : SATURN : : TRITON : ____ E ____ ____ ____ N ____
3. MERCURY : FIRST : : ____ A ____ ____ : fourth
4. SURFACE : C ____ U ____ T : : INTERIOR : CORE
5. VENUS : M ____ ____ ____ I ____ ____ STAR : : EARTH : BLUE PLANET

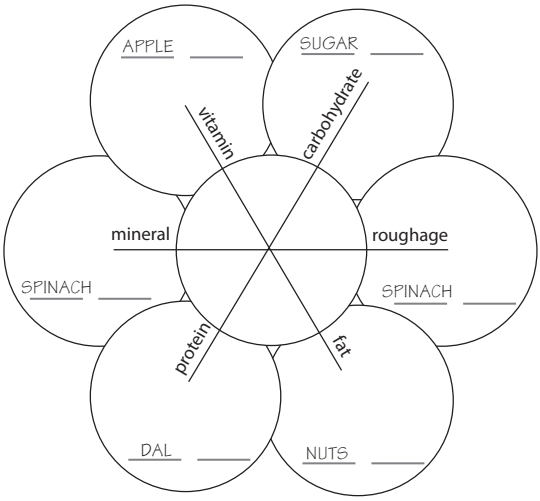
H Given below are the steps for sedimentation and decantation. Conceptual Understanding
Number them correctly. Then mark and label **sedimentation** and **decantation** in the given diagram.

____ Impurities heavier than water will settle at the bottom of the beaker, leaving clear water above.
____ This is decantation.
1 Take water with insoluble impurities in a beaker.
____ Slowly pour the clear water into another beaker.
____ Let the water stand for some time.
____ This is sedimentation.



I One food item is given in each circle. Choose the other and write from the column given.

Application of Knowledge



J Fill in the blanks with words from the brackets.

Application of Knowledge

1. When Ajay pushes the pedals of his bicycle, he applies _____ (**force** / **no force**) to move it.
2. Diya kicked a football. It rolled on the ground and finally came to rest due to _____ (**elastic** / **frictional**) force.
3. Ali threw a ball in the air. It came down due to _____ (**muscular** / **gravitational**) force.
4. Pawan is able to move his study table to another corner of his room. This means _____ (**work** / **force**) is done.
5. Neha's house has a solar heater. This means she uses the energy of the _____ (**atom** / **sun**) to heat water.

Projects

A Make charts.

Collaboration

Divide the class into four groups.

Group 1: Make a chart on different types of nutrients.

Group 2: Make a chart on preservation of food.

Group 3: Make a chart on the different types of teeth and the parts of a tooth.

Group 4: Make a chart on useful and harmful effects of microbes.

Display the charts in your class.

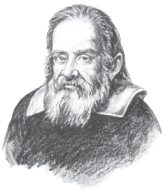
B Visit a zoo.

Experiential Learning, Creativity

Visit a zoo. Observe three birds and three mammals in details. Write about them and draw their pictures in your notebook.

C Make a PowerPoint presentation.

Digital Literacy



Galileo Galilei (1564–1642) was an Italian scientist, astronomer and mathematician. He was the first to build an improved astronomical telescope to study the stars and planets. Search on the Internet to find more about him and make a PowerPoint presentation.

D Make a model of the earth.

Creativity, Application of Knowledge

Make a three-dimensional model of the earth showing its different layers – Core, Mantle and Crust. You can use modeling clay of four different colours.

E Find out.

Experiential Learning

Find out some important telephone numbers – hospital, ambulance, police station, fire station and so on. Write these numbers on an A4 sheet of paper and put up in a wall in your home.

F Join the dots and colour the picture.

Multidisciplinary Approach, Art Integration