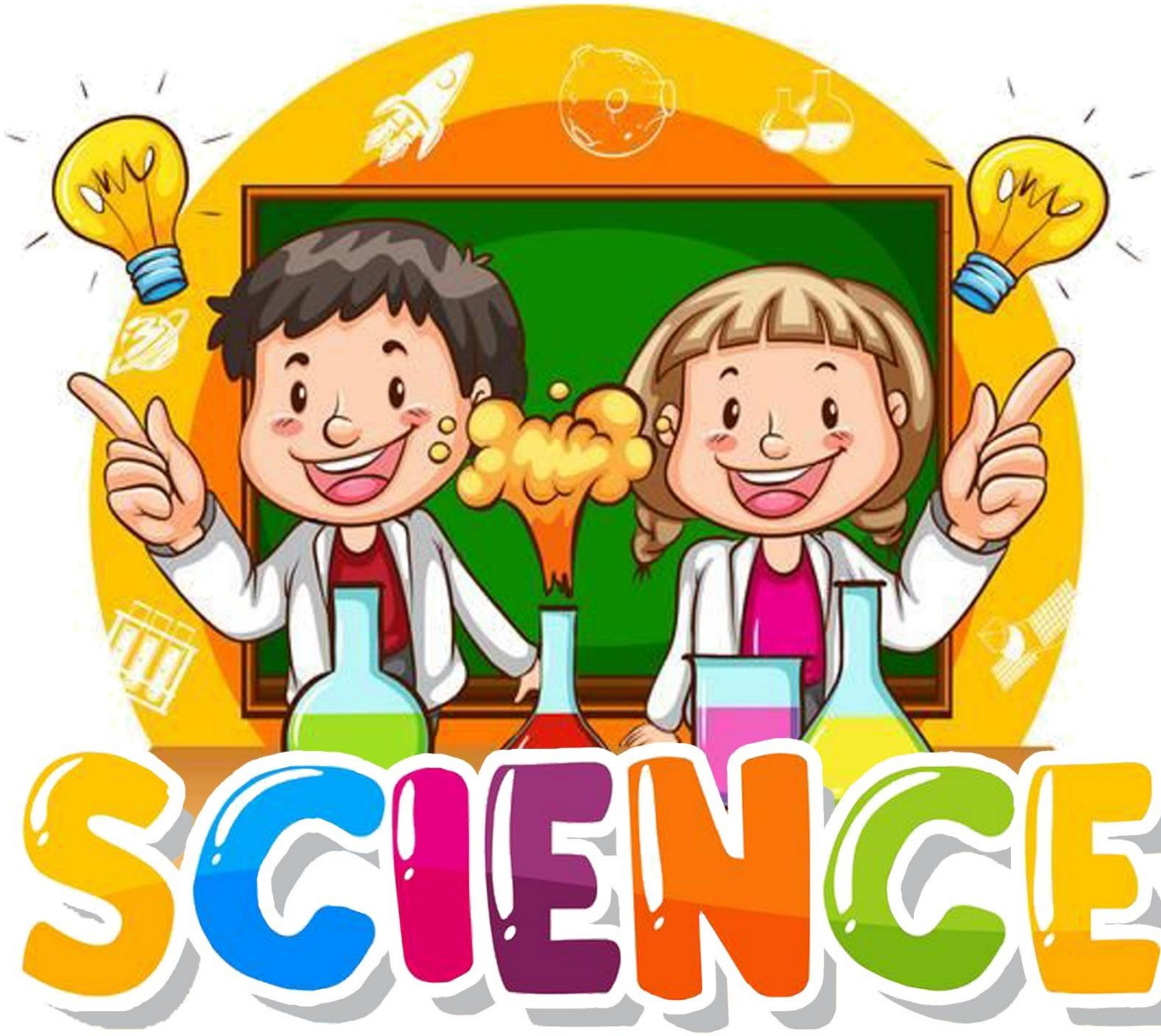
Grade 7



Activity 1

Let us investigate the solvent property of water

Required materials: A few transparent vessels, a stirring rod, a few substances to be dissolved (sugar, salt, coconut oil, blue ink, turmeric powder, wax, ...)

- Dissolve each substance separately.
- Record the observations in the following table using a (✓)

Substances	When put into water				
	Completely dissolve in water	Do not dissolve in water residues remains on the surface/ bottom of the vessel	Dissolve in water gives a colour to water	Dissolve in water. But colour does not change	Do not dissolve in water. But separate into layers.
Sugar					

- Water ……. (has/hasn't) the ability to dissolve in many substances.

Activity 2

Let us separate salt dissolved in water

Required materials: salt solution, metal spoon/lid

Content (Mrs. Rasangika Delpavithra / Mrs. Rangani Pathirana / Mrs. W. A.N.B. Wijesooriya/ Mrs. Chamika Rathnaweera.
Translated by : Nayomi Wijesooriya
Created by: S.A.R.LSamarathunga / R/Matihakwala Vidyalaya,opnayaka,Balangoda

Put salt solution on to the spoon/lid and hold it over a candle flame. (Conduct this under the supervision of an adult)

What are the observations?

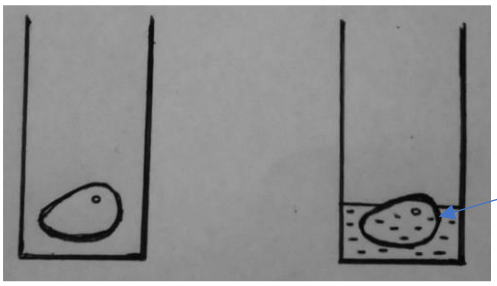
……
……

Activity 3

Let us investigate the coolant property of water

Required materials: 2 eggs, 3 vessels, water

- Boil the two eggs.
- Transfer one boiled egg to an empty vessel and the other to a half-filled vessel of water.
- After a few minutes touch both eggs and observe.
- What can you say about the temperature of each egg?
  ……..
- Insert the hand into the vessel that you put the egg.
- What has happened to it?
  ……..



- To where does the temperature of the boiled egg transferred?
  ……..
- What is the term used to define the ability to cool any heated object?
  ……..

Content (Mrs. Rasangika Delpavithra / Mrs. Rangani Pathirana / Mrs. W. A.N.B. Wijesooriya/ Mrs. Chamika Rathnaweera.
Translated by : Nayomi Wijesooriya
Created by: S.A.R.LSamarathunga / R/Matihakwala Vidyalaya,opnayaka,Balangoda

Extra activity: Let us make a simple thermometer at home

Required materials: Two small bottles, two pen tubes, coloured water, ice cube

- ✓ Pierce the lids of the bottles and insert pen tubes into them. Make sure they are air tight.
- ✓ Immers upside down vertically the pen with the bottle in water and keep an ice cube on the base of the bottle.
- ✓ After a while you will be able to observe that coloured water rise along the tube.
- ✓ Hold a small drop pf water in the tube and remove the bottle.
- ✓ Then you could observe that the drop of coloured water remains in the midway of the tube.
- ✓ Leave one bottle on the table. Take the other and hold it from the glass portion.
- ✓ What is your observation?

  .....
- ✓ Then, immerse it in the water basin.
- ✓ What is your observation?

  .....
- ✓ The drop of water rises along the tube due to heat of the hand.
- ✓ It moves down quickly because the air inside get cool when immerse in water.
- ✓ Thus, this activity can be used to investigate the coolant property of water as well.

Activity 4: Investigate whether water is required for the existence of life.

- ✓ Have you seen what happens when a fish is taken out of water?
  .....
  .....
- ✓ What are the things that are transported through water in the human body?
  .....
  .....
- ✓ What will happen when the amount of water supplied to a plant decrease?
  .....
  .....

Content (Mrs. Rasangika Delpavithra / Mrs. Rangani Pathirana / Mrs. W. A.N.B. Wijesooriya/ Mrs. Chamika Rathnaweera.
Translated by : Nayomi Wijesooriya
Created by: S.A.R.LSamarathunga / R/Matihakwala Vidyalaya,opnayaka,Balangoda

Fish in the tank

Plant with required amount of water

Plant with lesser water supply

- ✓ Water acts as a medium for life for the aquatic animals.
- ✓ Water aids in transportation of man substances in human body.

Activity 5

- Create a creative poster to be posted in the school wallpaper to illustrate the importance of water.

Evaluation

I. What are the properties of water?

……
……

II. Write two instances where the solvent property of water is used in the kitchen?

……
……

III. Observe the label of any bottle and record the substances that are dissolved in it.

……
……

IV. What are the industries that separate substances that are dissolved in water?

……
……

V. Write two biological process that take place in human body with the use of water.

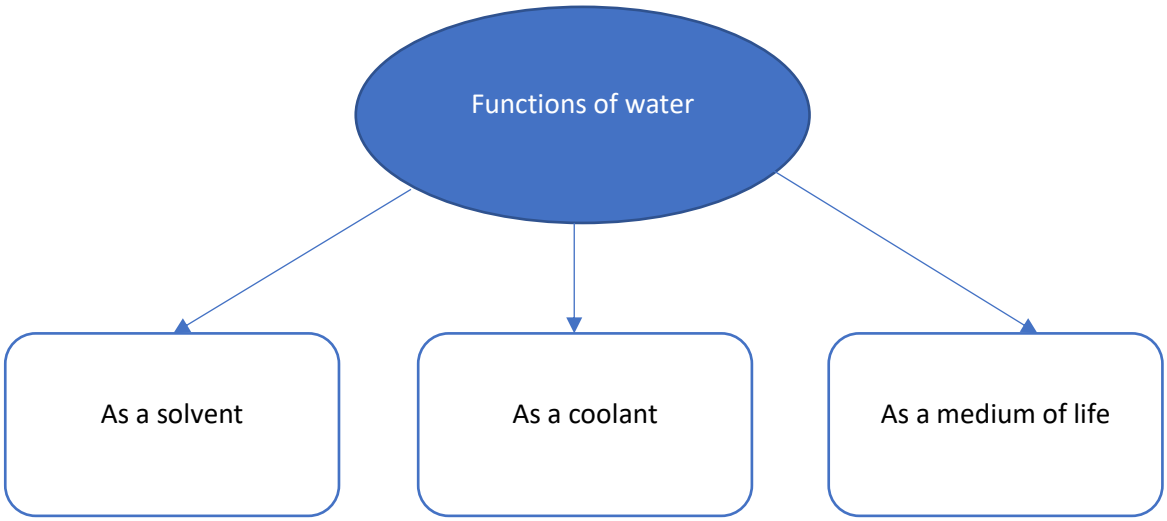
……
……

VI. Write two instances where coolant property is used in day-to-day activities?

……
……

Content (Mrs. Rasangika Delpavithra / Mrs. Rangani Pathirana / Mrs. W. A.N.B. Wijesooriya/ Mrs. Chamika Rathnaweera.
Translated by : Nayomi Wijesooriya
Created by: S.A.R.LSamarathunga / R/Matihakwala Vidyalaya,opnayaka,Balangoda

Summary



- Dissolve many substances in water
- Dissolve gasses in water
- Important in maintaining sanitation
- Useful in medical field

- Used in radiators in vehicles
- To avoid overheating of machines when functioning

- Provide habitat for many aquatic organisms
- Act as a medium for biological activities taking place in all living beings

Translated by: Nayomi Wijesooriya

Content (Mrs. Rasangika Delpavithra / Mrs. Rangani Pathirana / Mrs. W. A.N.B. Wijesooriya/ Mrs. Chamika Rathnaweera.
Translated by : Nayomi Wijesooriya
Created by: S.A.R.LSamarathunga / R/Matihakwala Vidyalaya,opnayaka,Balangoda