3.4 At the Science Fair

MARBLING

'Hello, I'm Bhumika. I'm going to show you an interesting process of coating paper - The process is called marbling.

For this, we need the following :

- a bucket, some water
- kerosene or turpentine
- oil-paints (red, blue, yellow, etc) and a brush
- white sheets of paper

Now I will explain the procedure :

First we need to fill this bucket three fourths (3/4) – up to here – with water.

The oil-paints are thick. We dilute the paints with a spoonful of turpentine or kerosene. Stir it nicely to get a good mixture.

Now I will use the brush, take a few drops from each of the oil-paints and sprinkle them gently on to the water.

The paint floats on water. I'll use the brush again to twirl the colours and make different shapes and designs on the surface of water. Isn't it interesting? The next step has to be done very carefully.

I will keep this drawing paper gently on the surface of the water and press it a bit.

Yes, now let us lift the sheet out of the bucket like this. Hey! What do we see? Such beautiful colours and shapes and designs! We will keep the sheet of paper away till it dries.

Do you want to try marbling a sheet of paper? Let me help you. No? Ok. Thank you for watching my presentation.

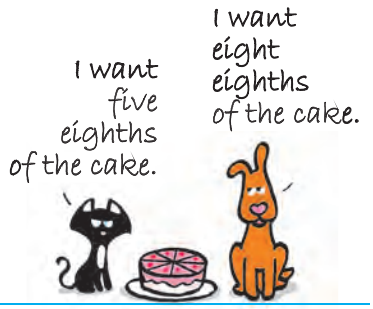
Oil doesn't dissolve in water, but floats on its surface.
We use this property for marbling.

POINTERS

1. Learn to present the process of marbling. Do so with a demonstration, if possible.

2. Read the following fractions :

$\frac{1}{2}$: one half	$\frac{3}{2}$: three halves
$\frac{1}{3}$: one third	$\frac{2}{3}$: two thirds
$\frac{1}{4}$: one fourth	$\frac{3}{4}$: three fourths
$\frac{1}{5}$: one fifth	$\frac{2}{5}$: two fifths
$\frac{1}{9}$: one	$\frac{7}{4}$: seven .....



3. Find 3 nouns, 3 pronouns and 3 prepositions from the passage.

4. Form pairs. Write a set of (step-by-step) instructions for marbling paper.

5. With the help of your teacher or parents, collect other simple craft activities and learn to present at least one of them.

6. Prepare a poster for your marbling activity.

MAGIC WATERING CAN

'Good morning! I am Tanmay. I love to water my plants and my plants love water! They want showers every day! But we cannot waste water. That is why I have made this magic watering can for them!

To make the magic watering can, we need :

an empty tin with a lid, a nail and a hammer.

This is how I made the can :

I made a hole in the bottom of the tin using the nail and the hammer. Then I took the lid and made many holes in it. I was very careful not to hurt myself.

The magic watering can is now ready for use !

Now, see how I use my magic can :

I put a finger on the bottom hole, and fill the can with water. Then I put the lid on the tin and turn the tin upside down, without removing my finger.

See, now I will remove the finger. The shower starts. When I close the hole with my finger, the shower stops.

Would you like to try this magic ?

It is because of air pressure that the water starts falling down from the can. And when it stops, that is also due to air pressure – the pressure of the air outside the can.

POINTERS

1. **Present the process of making and using a watering can.**

2. **Complete the following sentences in at least two different ways, using your imagination.**
   (a) I was very careful not to ..... .
   (b) Would you like to ..... ?

3. **Read and translate the following sentence.**
   'I love to water my plants and my plants love water !'
   Here, water is used first as a verb and then as a noun.
   Find other words that are used as a noun and as a verb.

4. **Form pairs. Write a set of step-by-step instructions for -**
   (a) Making a magic watering can
   (b) Using a watering can.

5. **With the help of your teacher and parents, collect other simple science experiments and learn to present at least one more experiment.**

6. **Prepare a poster on your 'Magic Watering Can'.**