3.7 At the Science Fair

The Science Fair at Vidya Vardhini School was always an exciting affair. There were a number of stalls (never less than 50), entertainment booths and of course refreshments ! There were two basic rules. One, everything should be handled by students and two, everything – even the entertainment booths and refreshment stalls – had to have a scientific base !

Preparations for the fair began at least a couple of months in advance. The first step was brainstorming. The Principal invited ideas for the event from students, teachers and even parents ! A host of ideas poured in. Luckily, many parents not only contributed ideas but also volunteered to help with the planning and implementation of the big event ! So a committee of parents and teachers was set up to look after all the work of the fair. Some student representatives were also taken on the committee to give them a first hand experience of managing big programmes like this.

The committee identified certain themes for the fair. They were – Plants, Animals, Properties of Substances, Energy (forms of energy and energy resources), Science in our Everyday Life, Latest News from the World of Science, and Food and Nutrition. Considering the area of the school playground and the estimated turnout, it was decided to allow 56 stalls in the Fair. The stalls were allotted to as many groups of children. Each group selected a topic/idea from the chosen themes. (The committee had to make sure that the topics were not repeated.)

The young scientists began their work in earnest. They began by collecting a lot of information about their topic using their science textbook, their school library and also the internet. They shared and discussed this information in their groups. The next step was to decide the exact activity for their stall – whether they would build and display a model, or give a demonstration, or present their project through posters or simply exhibit a collection.

The Principal announced that the language, appearance and content of the presentations were all important. The language teachers helped the young stall holders to make their graphic and oral presentations more effective.

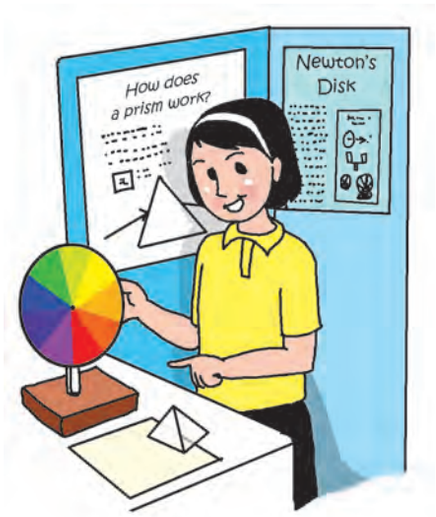
Graphic Presentations

- Write to the point so that a visitor may read a chart or poster at a glance.
- Make use of bullet points or bulleted lists.
- Use pictures and diagrams and label them.
- Use pictograms, graphs, pie-charts etc. to show numerical data.
- Plan all your posters, charts properly before you start making them.
- Make a rough 'mini-copy' before you begin work on the big, final poster or chart.
- Don't forget to check your spellings, sentences or other errors in the 'mini-copy' itself.
- Use different colours to highlight important features, but use them judiciously.
- If you have used any text, pictures, diagrams, etc. from elsewhere, acknowledge the source.

Oral Presentations

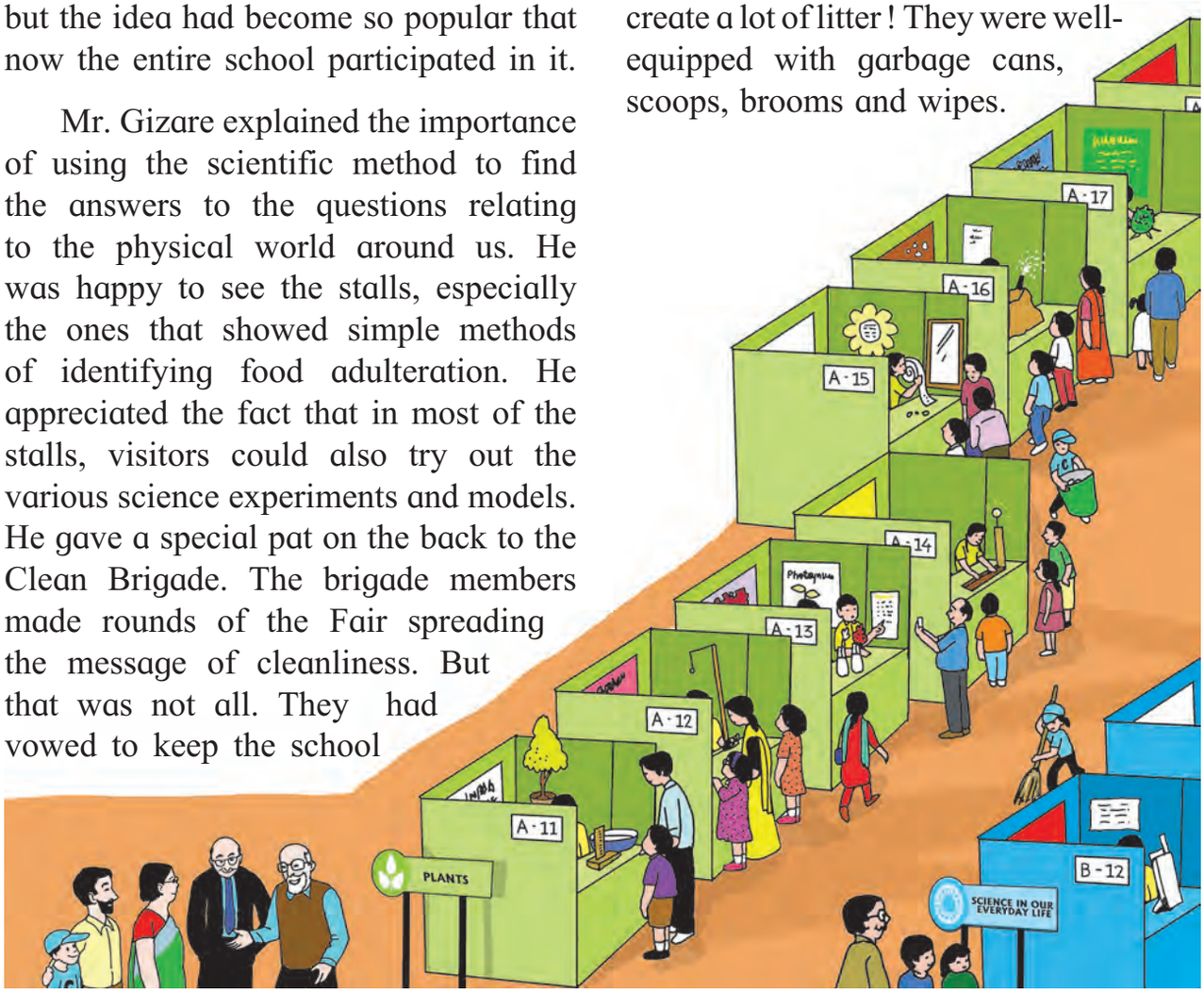
- The oral presentations or speeches should be short and to the point – 2 to 3 minutes at the most.
- They should be directly related to the model, demonstration or specimens exhibited in the stall.
- Be confident when you make a presentation.
- Rehearse the speech well.
- Be ready to answer relevant questions. Practise doing that with your friends.

- Make use of the visuals or graphics in the stall. Point to the relevant parts when you speak.
- Wear clean and tidy clothes, but do not 'dress up' to show off.
- Be polite, be pleasant when you talk to the visitors. If you don't know the answer to a question, say so. But later on, try to find the answer.
- Smile !



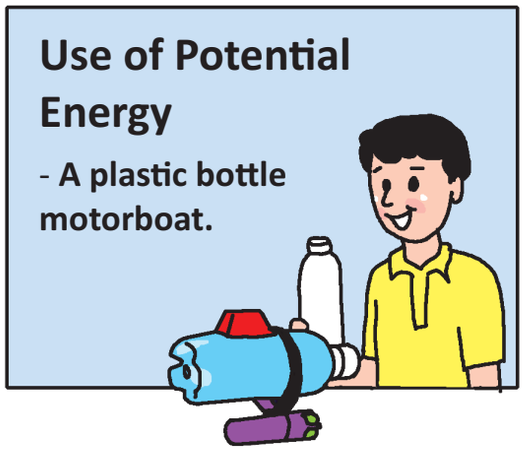
At last the big day arrived ! The fair was inaugurated by the oldest science teacher, Mr Gizare. It was Mr Gizare who had come up with the idea of a 'Science Fair' some 25 years ago. Initially, it was meant for just one class, but the idea had become so popular that now the entire school participated in it.

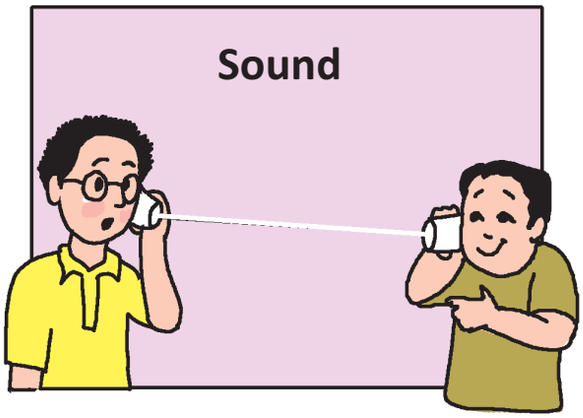
Mr. Gizare explained the importance of using the scientific method to find the answers to the questions relating to the physical world around us. He was happy to see the stalls, especially the ones that showed simple methods of identifying food adulteration. He appreciated the fact that in most of the stalls, visitors could also try out the various science experiments and models. He gave a special pat on the back to the Clean Brigade. The brigade members made rounds of the Fair spreading the message of cleanliness. But that was not all. They had vowed to keep the school premises spick and span during the Fair, though they expected more than a thousand visitors and half as many stall holders – they were a disciplined lot, but what with so many activities and experiments going on, it was bound to create a lot of litter ! They were well-equipped with garbage cans, scoops, brooms and wipes.



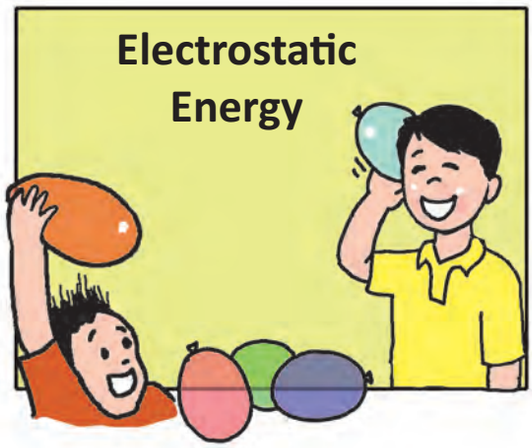
Let us also take a round of the fair to see some of the highlights. The sixth standard children were handling the following stalls:

The stall displayed the model of a watermill.

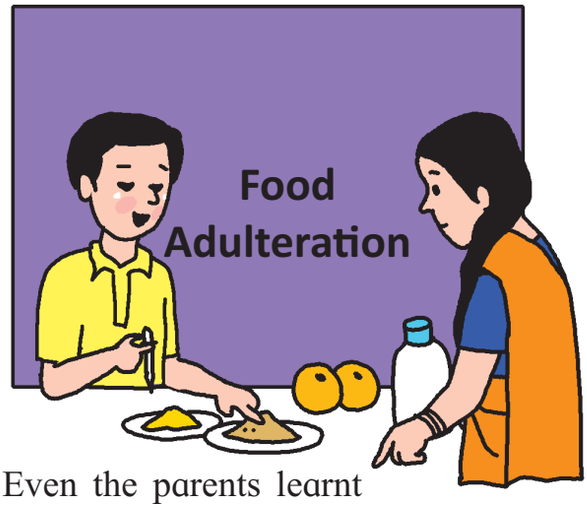




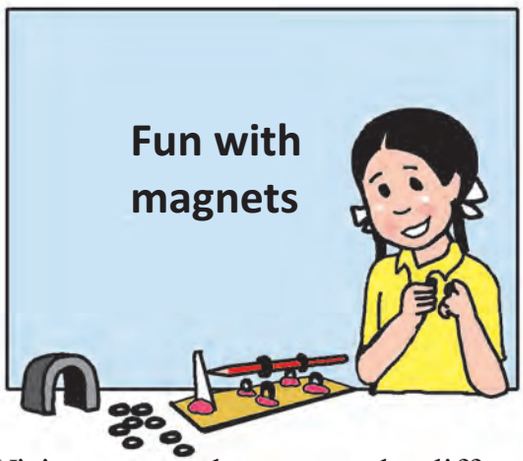
Everyone enjoyed making simple string telephones at this stall and then using them.



This stall was so popular, that additional help was needed to blow balloons as quickly as they were used up.



Even the parents learnt something at this stall!



Visitors queued up to see the different types of magnets at work.

Some of the visitors made video clips of the presentation at this stall. It consisted of different children playing the roles of different machines, all crying out turn by turn, 'Hey, we, too, need your attention! We can serve you well only if you take care of us'.

The fair was such a huge success that the school had to run it for three days instead of two! The Principal allowed this change in the time table only because it was a truly educational activity – not just for the children but also for their family and the entire community. No wonder everyone is already looking forward to the next year's Fair!

The Scientific Method

Observe what is around you.

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Ask questions – why, why not, how, etc.

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Can you think of an explanation? (This is what is called 'hypothesis' in the scientific method.)

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Set up an experiment to try out your 'hypothesis'.

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Record your observations in detail. (This is your data.)

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Draw conclusions. Do they match your hypothesis? If yes, why? If not, why not?

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Write down your findings and share them with others.

Why does a fridge magnet stick to the fridge door but not to the kitchen platform?

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Maybe it has some special powers.

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I will try to stick it to different things – a wall, a tile, a potato, a wooden table, pots and pans, a plastic bottle, a cup.

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The magnet sticks to some surfaces but not to others.

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It seems as if some metal objects are attracted to the magnet. They are made of iron or steel.

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Magnet attracts iron, but not all substances – not even all metals.

POINTERS

1. Answer the following questions :

   (a) What two basic rules were followed in the Science Fair?

   (b) How early did the preparations for the Science Fair begin?

   (c) How was the committee formed?

   (d) What themes did the committee identify?

   (e) How did the students prepare for their stalls/presentations?

   (f) What did Mr Gizare appreciate the most?

   (g) What did the Clean Brigade do?

2. Make charts to show the important points to remember while making –
   (a) A graphic presentation (b) An oral presentation.

3. Relate the themes of the Fair to your science textbook by writing the relevant chapter numbers under each theme.

4. Find, in your science textbook, the topics of the stalls handled by students of VI A. (Write the page number.)

5. What themes would you like to add to the themes given in this passage?

6. Imagine you are visiting the Science Fair. What other stalls (apart from the ones mentioned here) are you likely to find there? Try to list at least five more stalls.

7. Using your imagination, and information from other sources, describe any one stall in detail.

8. Choose a 'question' through your own observation. Try to follow the scientific method to find the answer to that question. Take the help of your teacher/parents to set up the experiment.

9. Visit a library : Find and read the biography of your favourite scientist.

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