Chapter 4: At the Science Fair

EXERCISE [PAGE 80]

Exercise | Q 1.(a) | Page 80

Answer the following question:

What two basic rules were followed in the Science Fair?

SOLUTION

The two basic rules followed at the Science Fair were:

- 1. Everything was handled by the students and
- 2. Everything had a scientific base.

Exercise | Q 1. (b) | Page 80

Answer the following question:

How early did the preparations for the Science Fair begin?

SOLUTION

Preparations for the Science Fair began at least a couple of months in advance.

Exercise | Q 1. (c) | Page 80

Answer the following question: How was the committee formed?

SOLUTION

Many parents not only contributed ideas but also volunteered to help with the planning and implementation of the fair. So, a committee of teachers and interested parents was set up to look after all the work of the fair. Some student representatives were also included in the committee.

Exercise | Q 1. (d) | Page 80

Answer the following question: What themes did the committee identify? SOLUTION

The committee identified the following themes for the fair: 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.

Exercise | Q 1. (e) | Page 80

Answer the following question:

How did the students prepare for their stalls/presentations?

SOLUTION

The students prepared for their stalls/presentations in earnest. They began collecting a lot of information about their topic using their science textbook, their school library, and the Internet. They shared and discussed this information in their groups. Then they decided the exact activity for their stall - whether they would build and display a model, give a demonstration, present their project through posters, or simply exhibit a collection.

Exercise | Q 1. (f) | Page 80

Answer the following question: What did Mr. Gizare appreciate the most?

SOLUTION

Mr. Gizare appreciated the fact that in most of the stalls, visitors could also try out the various science experiments and models.

Exercise | Q 1. (g) | Page 80

Answer the following question: What did the Clean Brigade do?

SOLUTION

The Clean Brigade members made rounds of the fair spreading the message of clean liness. They had vowed to keep the school premises spick and span during the fair, and they were well-equipped to do this with garbage cans, scoops, brooms, and wipes.

Exercise | Q 2 | Page 80

Make charts to show the important points to remember while making -

- a. A graphic presentation
- b. An oral presentation

SOLUTION

Students do it by yourself.

Exercise | Q 3 | Page 80

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

SOLUTION

Students do it by yourself.

Exercise | Q 4 | Page 80

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

SOLUTION

Students do it by yourself.

Exercise | Q 5 | Page 80

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

SOLUTION

Sollie themes I would like to add are:

- i. Our wader' resources
- ii. Disposal of plastic waste (W)
- iii. Global warning.

Exercise | Q 6 | Page 80

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.

SOLUTION

Students can go through the science textbook and find out what else can be displayed at the stalls.

Exercise | Q 7 | Page 80

Using your imagination, and information from other sources, describe anyone stalls in detail.

SOLUTION

I went to the stall dealing with the adulteration of food. There were quite a number of parents in front of this stall, and I was curious to see what was being explained. The stall had an attractive poster at the entrance. It said, 'Do you know what you are eating?' Then it told us about the presence of adulterants in the food we eat. how widespread adulteration is, and how it affects our systems. There were a variety of other charts put up around the stall. They told us of the adulterants that were present in the common food items that we used every day - like milk, oil, spices. etc. and how to detect them.

The four pairs of students in the stall had different foodstuff in front of them. The first pair had chilli powder - adulterated chilli powder in one bowl and pure chilli powder in another bowl. There was a beaker of water kept handy. Then they showed the audience a simple way to test for artificial colouring. You merely added the chilli powder to the water. If it was pure, the water did not change colour. If it was adulterated. the artificial colourants descended as colour streaks.

The other three pairs dealt with

- a. the testing of green peas for artificial colour
- b. the testing of asafoetida (bing) for starch and
- c. the testing of powdered spices for starch. The tests were extremely simple but effective. They could easily be done at home. If the testing was more

complicated, the details were given in the charts. The harts were clear and interesting and the students were very confident and thorough bout their subject. Everyone was impressed.

Exercise | Q 8 | Page 80

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.

SOLUTION

- a. Oil and water do not mix, but milk and water do. Experiment with different liquids and come to a conclusion.
- b. Keep a few aluminium rods in the sun. Cover them with small bits of cloth of different colours. See which absorbs heat the most. Find the reasons.
- c. Observe the trees and flowers around you. Make a note of when they flower, when they lose their leaves, etc. Find the reasons.

Exercise | Q 9 | Page 80

Visit a library:

Find and read the biography of your favourite scientist.

SOLUTION

Jagdish Chandra Bose, Madame Curle, Louis Pasteur, Stephen Hawking, Alexander Graham Bell, Homi Bhabha, etc.