Plant Morphology – Can you guess why?

Lesson Objectives

1. To take an interest in plants around them
2. To observe the different parts of a plant
3. To try to deduce if a seemingly innocent part is really what it looks like or if it is a modification
4. To guess the reasons or need for these modifications

Classroom discussion

The lesson was on plant modifications. This is best learnt when students get to see samples and understand why it is a modification. I had asked children to bring plant samples to the class and it was heartening to see that most of them brought different samples - stem, root, leaves etc. Children know about the parts of the plant. So the first discussion was on the parts of a plant and their uses.

Students observed different samples - spines of opuntia, tendrils of beans, swollen roots of carrot, beetroot etc. They discussed which parts were modified and the possible reasons behind it. Then they were encouraged to cite other such examples. One of them said that the thorns of a rose were from stem. It is a stem modification to give protection to flowers. Another said the sepal of roses sometimes look like leaves. Therefore, it must be a leaf modification. That was impressive. Another one said the colorful parts of bougainvillea are leaves. Because they look like leaves. As the flower is small, the colorful leaves help attract bees. While they are actually bracts and not leaves, children's ability to predict the probable causes made me very happy.

From their answers, I was able to understand that they are able to observe a plant and guess the probable reason for modification. This would also make them look at plants very differently. Through this hands-on session and discussion I was able to achieve the expected learning outcomes.

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