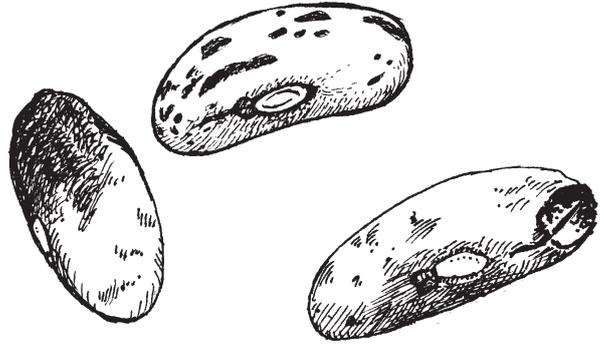


Mouldy Rajma

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Grade level: Classes V-VII



Introduction

In our everyday lives, questions arise that require logical, scientific thinking. Getting practice sorting things into sets and knowing how to use Venn diagrams can help in solving such problems.

Science concepts

1. Sorting things into sets
2. Use of Venn diagrams

Previous knowledge

The students should have some previous knowledge of Venn diagrams.

Students' Guide

Scenario

Premlata and Hargovind were sorting rajma. They found that although they looked all right from the outside, when they split the rajma in half, some of them were mouldy. Some of the rajma were bigger than the others. And some rajma were browner than the others.

Premlata found that all the mouldy brown rajma were big.

She also found that all the mouldy big rajma were brown.

Premlata's question is:

Does it therefore follow that all the big, brown rajma were mouldy?

Your Tasks:

A Form groups and discuss the following:

1. Is it important to answer Premlata's question? Why or why not?
2. Answer Premlata's question in any way that you can.
3. Use Venn diagrams to show the answer.
4. Think of as many more ways as you can to answer Premlata's question. Is there more than one correct answer?

B Present what each group finds to the others and have a class discussion.

Teachers' Guide

Suggested Teaching Strategy

1. Read the story out loud to the class.
2. Divide the class into small groups (4-6 students). Each group should discuss and write down the answers to each question.
3. Each group should present their results and conclusions to the rest of the class and a class discussion can follow.

About the Script

This script has not been tried out. It is included here in order to see if there is any interest in trying short scripts that require more mathematics than science. Also, it is meant to stimulate a discussion as to whether a (socially relevant) problem could be phrased in terms of a logic puzzle. Or has a puzzle just been moulded into a (perhaps unlikely) scenario?

