Learner Outcomes

Science- Powders and Crystals

Grade 4

1. Students will identify their five senses, sight, touch, taste, smell, and sound, which will later be used to separate the powders and crystals.
2. Students will define vocabulary terms at deal with powders and crystals.
3. Students will learn the names of the six substances
4. Students will use their four of their five senses to categorize the powders and crystals.
5. Students will compare and contrast the difference between the powders and crystals.
6. Students will state how each substance feels, looks, smells, and sounds by using their senses and recording on activity chart #2.
7. Students will use pocket scopes to examine the structure of the particles that make up each of the six substances.
8. Students will discover that three of the substances are crystalline form, composed of crystals and three for in powder form.
9. Students will observe how each substance interacts with water. Noting the differences in the way each responds to water.
10. Students will observe what happens when vinegar is added to each substance. Discovering that vinegar fizzes when combined with baking soda.
11. Students will observe what happens when iodine is added to each substance. They will learn that the starch will turn a dark blue-black color when mixed with iodine.
12. Students will test each substance with bromthymol blue, a pH indicator.
13. Students will make a folder to keep all notes and activities dealing with the powders and crystal’s unit.