**Colors in the Garden Betty Darleen Horton**

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**NGSS: Inheritance and Variation of Traits**

**LS3.B: Variation of Traits: Different organisms vary in how they look and function because they have different inherited information.**

**Pre Assessment: What colors are in the garden? How are these colors used by humans?**

**Materials: variety of fruits, vegetables and leaves from the garden, smooth stones, small scraps of cloth or white paper**

* **On the way into the garden, ask students to see how many colors they can see in the garden.**
* **If time allows, the leader could harvest some leaves and vegetables on the way in with the students. This will add about 10 minutes to the activity time. Easier – have carrots, beets, berries, red cabbage, green, yellow and red peppers, eggplant, blooms and green leaves – sliced into pieces (keep them in an air tight container and cool until ready to use to preserve the moisture).**
* **In an area where it is ok to pound the veggies with stones and make a little mess, gather the students.**
* **Have a short discussion about how plants use the sun, air, water and soil to grow and to make their own food. For older students the word photosynthesis is appropriate.**
* **To discover the colors in plants, give each student either a piece of white cloth or white paper. Allow students to select one item from the garden and then the leader should demonstrate how to place the paper or cloth around the item and rub and pound it with the smooth stone.**
* **Encourage students to try at least three different colored items from the garden. Before pounding the blooms, have students try to shake the pollen from the flower as it is quite colorful.**
* **Put the pounded items into the compost pile. Fan the paper or cloth for a minute to dry the natural dyes.**
* **Using the garden pump adds another dimension to this activity. Children of all ages will enjoy and learn from the experience of using the pump to rinse their hands.**
* **As a Post Assessment:**

**Ask students how they think colors in the garden have been used by past cultures. (Native Americans, pioneers and settlers and way beyond to medieval times) How are they used today? Point out that different colored fruits, roots and vegetables have high amounts of different vitamins and minerals.**

**Science, Art, Social Studies, Speaking and Listening**