Jelly Bean STEM experiment

Materials Needed:

Classic Jelly Beans

½-1 cup water

½-1 cup white vinegar

1-2 Foam/chinet paper plates or plate or dish with lip

Stopwatch

Paper to record observation

Optional: camera to take pictures

Directions:

1. The questions we are posing before the start of the experiment are

* Will the jelly bean colors dissolve faster in the vinegar or water?
* Do you think the colors of the jelly bean colors will make a difference in how fast they dissolve?

2) Arrange the jelly beans in a color **pattern** around the edge of a plate (great activity to work those fine motor and pattern skills)

3) After the jelly beans are arranged (this is a great fine motor activity for younger kids), choose *one* of the liquids to begin. Pour the liquid slowly onto the center of the plate and observe closely as the liquid disperses.

4) Start the timer as soon as all the liquid is poured onto the paper plate.

5) As soon as all the colors meet in the center of the paper plate, stop the timer.

6) Have students draw pictures and write the number from the stop watch. (it is ok to even have younger students to make scribble observations, to practice this form of recording. If you can not discern what the picture is ask “tell me about your picture?”)

7) Repeat the experiment by repeating the steps above with the second liquid – invite kids to note any differences they see between the two experiments.

Extensions:

Try this experiment with other candies like skittles or another jelly bean variety , how do the results change?

Does the temperature mater, try warm water and compare to cold or room temperature?

How about other liquids such as salt water, lemon juice or soda?

Questions to ask:

* What were your observations? Have students look back on their pictures they took with camera or drew to record.
* Did one color of jelly bean dissolve faster than the others?
* In the beginning of the experiment you made a guess ,a prediction, what would happen; were you correct?
* Did you like the experiment? What was your favorite part.
* What would you do differently if you could do the experiment again.

Resources for this experiment are Sara’s STEM stuff, craftymorning.com, 123homeschool4me.com