**Venn Diagrams**

Samantha DeLorenzo

**Goals:**

* Student will learn to organize data accordingly.
* Student will learn how to interpret data that is given on a Venn diagram.

**Objectives:**

* Given a three circle Venn-diagram the student will record data accurately with 100% accuracy.
* Given a three circle Venn-diagram that is filled in with data, the student will be able to answer questions correctly with 100% accuracy based on the given information.

**Important Terms:**

* Intersection- consists of all elements in both A and B.
* Universe- gives us the set of elements being considered (everything inside and outside A and B.
* Venn Diagram-a diagram that uses circles to represent sets and theirrelationships.
* Union- everything in either A and B

**Materials:**

* Variety of Chocolate Candy
* Jolly Ranchers
* Venn-Diagrams

**Procedure:**

1. Setting up the Class
2. Student can be divided up into pairs, groups, or it can be done individually.
3. Distribute necessary materials.
4. Explain what the students will be doing.
5. Activity:
6. Each student will be given a Venn-diagram and directed to label it appropriately.
7. Each student will grab 3 pieces of candy.
8. Students will then put each piece of candy in the necessary part of the Venn-diagram.
9. After, they are finished they will come to the board and put tally marks in each part of the diagram.
10. Then, as a class we will look over the Venn-diagram and observe what we see and answer questions.

**Citations:**

[**http://www.purplemath.com/modules/venndiag2.htm**](http://www.purplemath.com/modules/venndiag2.htm)

[**http://www.classroomjr.com/printable-blank-venn-diagrams/3-circle-venn-diagram-blank/**](http://www.classroomjr.com/printable-blank-venn-diagrams/3-circle-venn-diagram-blank/)

[**http://www.readwritethink.org/files/resources/printouts/Venn3Circles.pdf**](http://www.readwritethink.org/files/resources/printouts/Venn3Circles.pdf)

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**Venn Diagram**

**After completing the Venn diagram with the class answer the following questions:**

1. How many people have chosen both chocolate and chocolate with peanuts?
2. How many people chose all three (chocolate, peanuts, and caramel)?
3. How many pieces of candy were taken**?**

**Higher Level Thinking**

1. What is the union of the three circles?
2. A person is given a bunch of different varieties of candy. 9 pieces can be distributed throughout chocolate, chocolate and peanuts, and chocolate peanuts and caramel. Also, 11 pieces could be distributed between chocolate, chocolate and caramel, and chocolate peanuts and caramel. Two pieces belong in the chocolate caramel and peanuts section. How many pieces of candy are their?