**Name: Alyssa Barthel Date: October 26, 2012**

**Subject/Grade: Discrete Mathematics Time: 15 minutes**

**Standard: 4th Grade Data Analysis:** Collect, organize, display, and interpret data, including data collected over a period of time and data represented by fractions and decimals. 4.4.1.1 Use tables, bar graphs, timelines and Venn diagrams to display data sets. The data may include fractions or decimals. Understand that spreadsheet tables and graphs can be used to display data.

**Launch:**

**-**How many of you have ever been to a zoo? What’s your favorite animal? Do you notice how the zoo is set up? My friend Tracy works at the Minnesota Zoo and she asked me if my class could help her with something. Some new animals came to the zoo and they need a place to stay. She needs your help in deciding where to put them. Can you help her?

**Explore:**

**-**Students will be given a Venn diagram. They will also be given a sheet with different animal pictures on it. The task they will have will be to put the animals into the correct categories. The tricky part about this lesson is that some animals overlap and need to be put into two categories. It will be up to the students to decide where each animal is placed.

**-**Students will work in pairs or in groups, but all students will be responsible to complete their own diagram. I will give the students some time to finish this task.

**Summarize:**

**-**We will meet back as a whole group and talk about where the students placed the animals and why. Hopefully they will have seen that the circles overlap and that is where you put the animals that live both of the categories.

**Analyze:**

**-**We could go even further with this lesson. We could make a table of our findings. Then we could graph the table of information. We could also figure out which category held the “mode” or the most animals.

-For homework the students will be asked to go home and fill out another Venn diagram. This time they will decide what to label the circles and what to put in each of them. We will use this data in the following class activities.