Data Lesson Plan

Standard:

3.4.1.1- Collect, display and interpret data using frequency tables, bar graphs, picture graphs, and number line plots having a variety of scales. Use appropriate titles, labels and units.

Launch:

How many of you love birthdays? What are some reasons why you like your birthday? Who wishes it was their birthday every day? What are some ways to celebrate birthdays?

Explore:

Begin by asking students if they know what a census is. Their answers should be a survey, a way to collect data, acquiring and recording information about population, etc. Discuss with students that the census helps us plan what we will need in the future by asking people about their lives today. We will be doing an art exercise that will help the class plan for an all student birthday party.

The students will each receive a birthday party hat in which they will need to follow directions in order to decorate for the correct month. For each of the twelve months, tell those students with birthdays in that month to color and decorate their hat in a particular way (i.e. January birthdays make blue hats with red stars; June birthdays make yellow hats with orange stripes). The students will also be asked to write the day of the month that their birthday falls on.

* January: Yellow with green dots
* February: Pink with red hearts
* March: Green with orange stripes
* April: Blue with yellow stars
* May: Orange with blue dots
* June: Purple with red swirls
* July: Red stripes with blue and white stars
* August: Yellow with orange stripes
* September: brown with red dots
* October: Orange with black stars
* November: Purple stripes with yellow dots
* December: Green with red stripes

Summarize:

The students will then use their hats to take a “hat census.” We will go through the list of twelve different hat designs and tally on the board the number of students that now have each type of hat. This will be a way of sharing the data with the entire class. Next, students will have to come up with a new way to sort the data. Another way could be putting all of the same day of the month together (all of the birthdays on the 5th together).

Apply:

Explain that the class will choose one day for a party to celebrate all of the students’ birthdays. You can use the data from the class “hat census” to make real party hats for the celebration. The colors you use will represent the different months in which students celebrate their birthdays. The students’ job is to use the “hat census” data to come up with a date to celebrate everyone’s birthdays. The date has to take place during the school year on a day that we are in class.