**Interpreting Data**

\* Group IEP students with Level ¾ math student who will support them; teacher to circulate groups with IEP students during ‘working on it’

**Getting Started**: (5 min)

**Introduce unit:** Over the next couple of lessons you will be conducting surveys, analyzing data, drawing appropriate graphs, and finding the mean, median, and mode. Today we are focusing on interpreting (understanding) a number of graphs, which will assess what you already know and what we need review and learn about graphing.

**With the person beside you, answer the questions:**

***Why use graphs to present data?***

Because they...

* are quick and direct
* highlight the most important facts
* facilitate understanding of the data
* can convince readers
* can be easily remembered

**There are many different types of graphs. *Name as many types of graphs as you can:***

* Bar graph: displays separate data in separate columns
* double bar graph: compare 2 sets of data
* histogram: displays continuous data (time, inches, temperature) >>
* pie chart/ circle graph: displays data as a percentage of the whole.
* Line graph: plots continuous data as points and then joins them with a line
* Scatter plot: displays the relationship between two factors of the experiment.

***Why do we have different graphs? What is the purpose of each?-* Question to think about throughout the lesson**

**Working on it** (15- 20 min)

**Explain activity:** Groups of students will get a chart paper with questions about a graph or graphs. These questions will get you thinking about the features of a graph, interpreting data on a graph, the purpose of different graphs, and making inferences. Will get 5 minutes to discuss and answer questions regarding how they interpret data.

***What is an inference?*** A conclusion we reach by reasoning (using what we already know and using the information we are given to come to a logical answer)- Example: If ¼ of you watch TV after school and a ¼ of you play a play station 4 game after school, I infer that at least ½ of the class has technology in their house.

**Consolidation** (10-15min)

As a class discuss the answers students got for the graphing questions. Resolve any misconceptions students have about pie charts, bar and line graphs.

Ask the question: ***Why do we have different graphs? What is the purpose of each?***

Instruct students to ***come up with one question they can ask about a graph(s) they interpreted***. Students ask their partner the question.

Remind students they will continue to work on interpreting data from graphs over the next few lessons.