# Where do I fit on the graph?

### Summary

Students will become familiar with several different types of graphs, such as bar graphs, pictographs, Venn Diagrams, and organized tables. Students will also learn to use a key to relate the meaning of various symbols on graphs.

#### Main Core Tie

Mathematics Grade 2

Strand: MEASUREMENT AND DATA (2.MD) Standard 2.MD.10

#### Materials

- Graphing Samples (pdf)

Name cards (could be magnetic)

Clothespins

- Graph Templates (pdf)

Pre-made titles, categories and/or pictures

- Graphing Ideas (pdf)
- What's for Lunch? (pdf)

#### Additional Resources

- Lemonade for Sale
  - , by Stuart J. Murphy; ISBN 0064467155
- Graph It!
  - , by Lisa Trumbauer; ISBN 0736812822
- Tiger Math
- , by Ann Whitehead Nagda; ISBN 080507161X
- Graphs
  - , by Sara Pistoia; ISBN 1567661203
- Graphing Activities
  - , by Joy Evans; ISBN 1557991243
- Graphs
  - , by Bonnie Bader; ISBN 0448432374

### Background for Teachers

Students will collect data and create graphs about themselves, their community, and the world around them. They will use a variety of methods to organize data, such as stickers, clothespins, name tags, coloring, tally marks, etc.

## Intended Learning Outcomes

- 1. Demonstrate a positive learning attitude.
- 5. Understand and use basic concepts and skills.
- 6. Communicate clearly in oral, artistic, written, and nonverbal form.

### Instructional Procedures

Invitation to Learn

A bar, a picture, organized tables, and a key . . . what do these things have in common?

What would you like to learn about your friends?

How can we collect, organize, and display this information?

#### **Instructional Procedures**

Have each student select his/her favorite candy bar.

Have the students sort, classify and organize their data.

Help the students understand that things in their everyday lives can be graphed in different ways.

Students graph their favorite winter activity, liquid to drink, season, etc. by using a pictograph, tally marks, and a bar graph (See <u>Graph Templates</u>) Explain that pictographs use pictures to represent choices.

Create a title for the graph. Make a key to represent the marks on the various graphs and organized tables. This will help students learn to label information.

Compare and discuss the data organized on the graphs and tables.

### Extensions

Instead of candy bars, collect, organize, and graph data from a variety of subjects and life experiences.

### Family Connections

Have students graph information about their families (e.g., graph favorite foods, eye color, hair color, favorite holiday, etc.).

Have students gather and organize data for a particular type of graph of family information.

Have the students teach a family member different types of graphs.

### Assessment Plan

- Observational:

Observe students graphing information.

- Written:

Have students complete a graphing worksheet.

Have students create a graph--include title, key, and markings.

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