# Bloomin' Bud Glyph

Summary

Students will learn about reading charts and graphs by creating a glyph.

Main Core Tie

Mathematics Grade 3 Strand: MEASUREMENT AND DATA (3.MD) Standard 3.MD.3

### Additional Core Ties

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

## Materials

- Glyph Interpretation Sheet
- 9" x 12" white or manila construction paper
- Glue

Die cut shapes (1" yellow and orange circles, green stems [straight and curved], 1" red, orange, yellow, green, blue, purple triangles, green leaf, green grass [2"x 6" and 4" x 6"], and yellow sun) Teacher glyph

Graph paper for student bar graph

- Rubric for graphs

# Background for Teachers

Interpreting data is an important aspect of mathematics. Students should find ways to read charts and graphs. Glyphs are a fun way to figure out information about a person. They help to interpret and describe data of many types.

### Intended Learning Outcomes

- 3. Reason mathematically.
- 4. Communicate mathematically.
- 6. Represent mathematical situations.

### Instructional Procedures

Invitation to Learn

How would you like to create a picture about you and see if your partner can figure out information about you? First, let's see if you can determine information about your teacher. Show a completed teacher glyph. Have the students use the <u>*Glyph Interpretation Sheet*</u> to explain what they learned about the teacher.

Instructional Procedures

Students create their own glyphs and have a partner interpret it.

Provide chart for students to read and make their own glyphs.

Pass out materials for students to make their own glyphs.

When they are finished, place students in small groups and have them interpret and compare glyphs to discover things that are the same and/or different.

### Extensions

In students' journals, using the <u>*Rubric for Graphs*</u>, have students create their own bar graph, line graph, or picture or pictograph.

Pass out large graph paper or have students graph one of the areas in their journals.

Tally, then graph, students' gender, favorite school subjects, and handwriting.

Students gather the data with the teacher and tally the different categories. Students graph the information for handwriting and favorite school subjects with crayons.

How many students like math?

How many students like reading?

How many student like spelling?

Science? Writing? Art? Music?

Determine the "scale" to use for the bar graph.

Give the graph a title. Label the horizontal and vertical axes.

Looking at the graph, have students determine the class' favorite subject.

Students write a paragraph to interpret their partner's or class' glyph or graph in their journal.

Students create their own glyphs for different holidays/seasons, hobbies, likes/dislikes, or about their family.

Picture graphs are fun for students. A <u>picture graph</u> of how students get to school is included.

Types of glyphs that can be made are:

Parent/child Baby block All about me Birthday Pumpkin patch Thanksgiving placement Gingerbread man Snowman Bookworm Valentine postcard Silly shamrock Eggs-citing egg Rainy day Home sweet home Fast food Ladybug Summer sunshine Design your own school year memories kite

Use the <u>list of weekly clothespin questions</u>. Each student has a clothespin with his/her name on it to indicate his/her choice on the chart for the week.

#### Assessment Plan

Put the students into pairs. Give each student a small checklist and have them interpret a different glyph. Check to see if interpretations are correct.

Bibliography Research Basis Baker, S., Gersten, R., & Kae-Sik, L. (2002). A synthesis of empirical research on teaching mathematics to low-achieving students. *Elementary School Journal*, 103(1), 51-73. Retrieved March 11, 2004, from Ebscohost database.

This article discusses factors contributing to the improvement of mathematics achievement of students, including active instruction, which is critical for engaging students in learning.

Bernier, R. (2004). Making yourself indispensable by helping teachers create rubrics. *CSLA Journal*, 27(2), 24-25. Retrieved March 2, 2005, from Ebscohost database.

Helping teachers create rubrics helps students meet those content standards. Various ways to use rubrics to document student achievement are discussed in this article.

Authors

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