

Table of Contents

What Is a Glyph?	3
Getting Started	4
Glyph Data Analysis	5
Meeting Common Core Standards	7

Glyph Units



Palm Tree	8
-----------------	---



Pumpkin	13
---------------	----



Turkey	18
--------------	----



Gingerbread	23
-------------------	----



Snowman	28
---------------	----



Heart	32
-------------	----



Flower	36
--------------	----



Bunny	40
-------------	----



Crab	45
------------	----

What Is a Glyph?

A *glyph* is a pictograph or hieroglyph. It is a non-standard way to collect, display, and interpret data. Students create pictures (the glyphs) by answering questions using a legend. The details in the picture provide information about the person who created the glyph.

The Magic of a Glyph

Learning to count, sort, make tally marks, combine sets, measure, and make patterns are all mathematical skills that students use regularly. The magic of using a glyph to practice these skills is that, in the process, students are also thinking critically by comparing and contrasting, reasoning, and drawing conclusions.

Glyphs easily span the entire curriculum. They are a perfect springboard for incorporating literature as well as reading, writing, math, and science. In addition, glyphs build classroom community as students learn about one another's interests and unique personalities. Most importantly, students are motivated to learn because glyphs are personal and meaningful.

Each glyph in this book includes directions, a legend, a data analysis page, and the patterns needed to complete it.

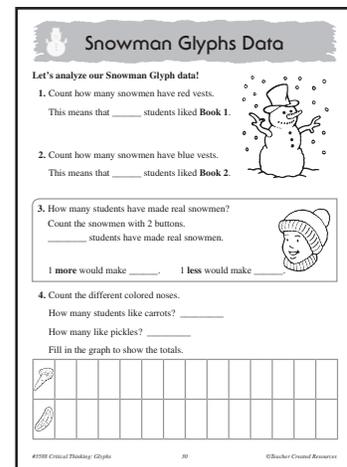
As you incorporate glyphs into your curriculum, children naturally become energized to learn about each other and, in turn, the skills needed for kindergarten. This book allows teachers to provide hands-on activities that will stimulate children's minds in a fun and creative way!

➔ The *directions* explain how to construct the glyph and any special materials needed.

🔑 The *glyph key* provides the questions to ask the children and the details to add to the picture. Students can fill in their own glyph keys before or after assembly of the glyphs. Determine which system will work better for your students and be consistent for each glyph.

❓ The *glyph data page* is where math skills are practiced and critical thinking begins. The page may be reproduced for each child or completed as a whole class. If completing it as a whole class, you may wish to enlarge the page, rewrite it on chart paper or use a document camera so all students are able to see and participate in the analysis process. With practice, students should fill in their own pages.

✂️ The *patterns* can be copied, enlarged, traced, or simply used as guides for students who prefer to make their own shapes.



Snowman Glyphs Data

Let's analyze our Snowman Glyph data!

1. Count how many snowmen have red vests.
This means that _____ students liked Book 1.

2. Count how many snowmen have blue vests.
This means that _____ students liked Book 2.

3. How many students have made real snowmen?
Count the snowmen with 2 buttons.
_____ students have made real snowmen.
1 more would make _____. 1 less would make _____.

4. Count the different colored noses.
How many students like carrots? _____
How many like pickles? _____
Fill in the graph to show the totals.

#138 Critical Thinking: Glyphs 10 ©Teacher Created Resources

Meeting Common Core Standards

Mathematics—Kindergarten

Counting and Cardinality

- Know number names and the count sequence.
- Count to tell the number of objects.
- Compare numbers.

Operations and Algebraic Thinking

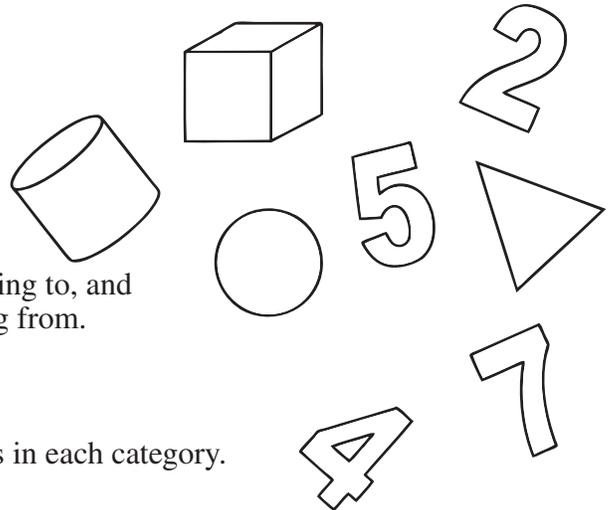
- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Measurement and Data

- Describe and compare measurable attributes.
- Classify objects and count the number of objects in each category.

Geometry

- Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
- Analyze, compare, create, and compose shapes.



English Language Arts Standards—Kindergarten

Reading: Literature

- Actively engage in group reading activities with purpose and understanding.

Reading: Informational Text

- Identify the front cover, back cover, and title of a book.
- With prompting and support, identify basic similarities in and differences between two texts on the same topic.

Speaking and Listening

- Participate in collaborative conversations with diverse partners *about kindergarten topics and texts* with peers and adults in small and larger groups.
- Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
- Speak audibly and express thoughts, feelings, and ideas clearly.

Language

- Determine or clarify the meaning of unknown and multiple-meaning words and phrases *based on kindergarten reading and content*.



Motor Development Skills



Write numbers.



Cut with scissors.



Draw shapes.



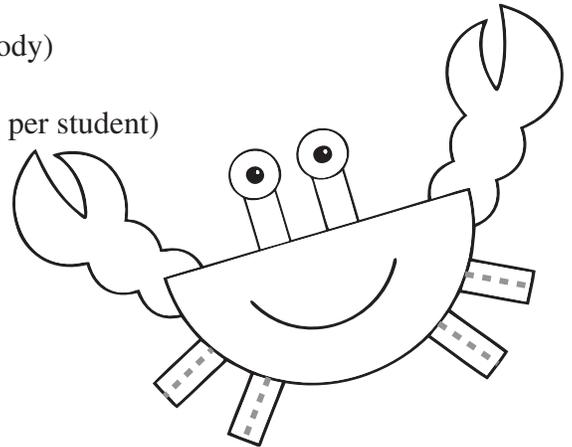
Color with crayons.

Crab Glyph



Materials

- large paper plate cut in half for each student (crab's body)
- yellow and blue construction paper for backgrounds
- strips of orange and red streamers cut into 3" strips (4 per student)
- orange and red construction paper (crab's pinchers)
- orange and red tempera paint
- crayons, glue, and scissors
- Crab Glyph Key for each student (page 46)
- Crab Glyphs Data page for each student (page 47)
- Crab Glyph Patterns pages (page 48)



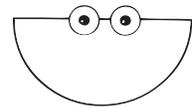
Making the Crab Glyph

Day 1

1. Read two different books about crabs and fill in the titles on the student glyph key pages before copying them.

Suggestions: *Clumsy Crab* by Ruth Galloway and *A House for Hermit Crab* by Eric Carle

2. Give each student one large paper plate that has been cut in half.
3. Ask each student if he or she has ever seen a real crab.
 - If **yes**, the plate is painted orange. Allow time for the plate to dry.
 - If **no**, the plate is painted red. Allow time for the plate to dry.



Day 2

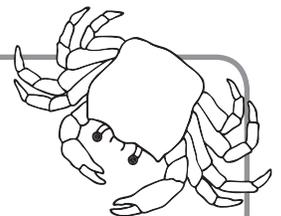
1. Ask each student to choose which book was his or her favorite.
 - If **Book 1** is chosen, cut eye stalks and glue them to the straight edge of the crab's body so they stick up. Eyes will be added to the stalks.
 - If **Book 2** is chosen, cut round eyes and glue them to the straight edge of the crab's body. They should only stick up a little. (No eye stalks will be used for Book 2.)
2. Each student then cuts out an orange or red set of pinchers to match his or her crab's body and glues them to the ends of the straight edge on the paper plate.
3. To make eight legs, glue two three-inch streamers on each side of the crab's body (on the rounded side). After the legs have been attached, cut each streamer in half lengthwise. This creates four legs on each side.
4. Ask each student if he or she has eaten crab legs.
 - If **yes**, attach the crab to a blue background.
 - If **no**, glue the crab to a yellow background.
5. Finally, have each student use a crayon to make a smiling mouth on the crab.



Extension: Ask each student to use a sentence strip to write the correct sentence. "My crab is orange (or red, if his or her crab is red)." Next, cut the strip apart at each word. Glue the sentence to the glyph in the correct order, leaving a little space between each word.

Crab Glyph Analysis

1. Copy the Crab Glyph Key page for each student to fill in.
2. Pair-share to examine and interpret each other's Crab Glyph.
3. Sort the completed Crab Glyphs with students according to each question.
4. Fill in the Crab Glyphs Data page as you answer each question.



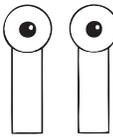


Crab Glyph Key

1. Have you ever seen a real crab? Trace the color word for your crab.

Crab Color	
Yes	orange
No	red

2. Which book did you like more? Circle the eyes you used.

Eyes	
Book 1: <hr/>	 eye stalks
Book 2: <hr/>	 no eye stalks

3. Have you eaten crab legs? Color the crayon for your background choice.

Background	
Yes	 blue
No	 yellow

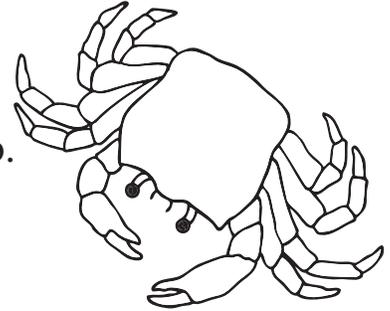
Crab Glyphs Data



Let's analyze our Crab Glyphs data!

1. Count the orange crabs.

That means _____ students have seen a live crab.

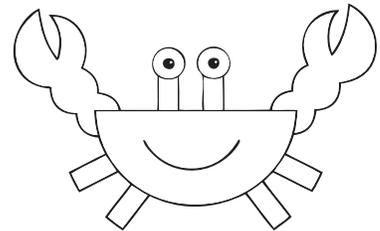


2. Count the red crabs.

That means _____ students have not seen a live crab.

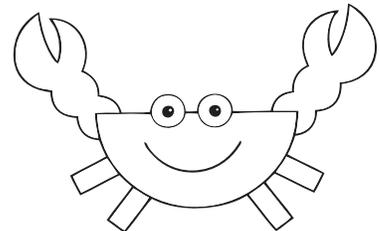
3. Count how many crabs have eye stalks.

That means _____ students liked **Book 1**.



4. Count how many crabs have no eye stalks.

That means _____ students liked **Book 2**.

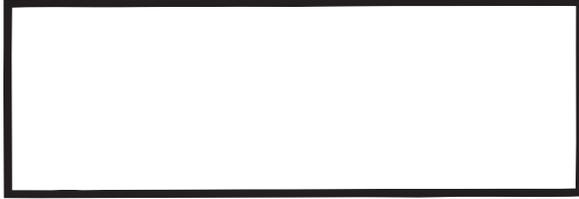


5. What information can you gather about the class eating crab legs?
Write or dictate a sentence about it.

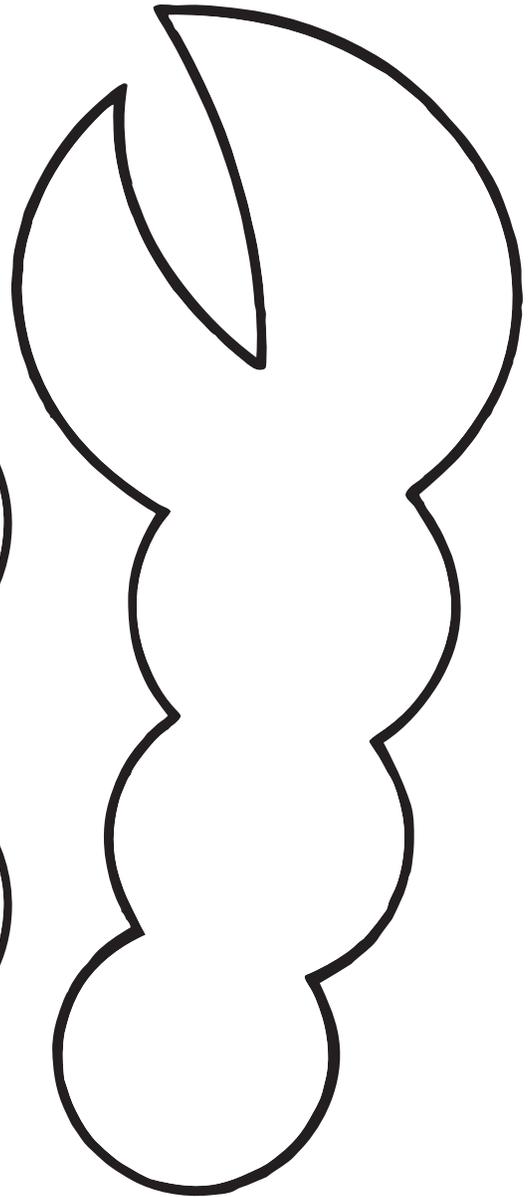
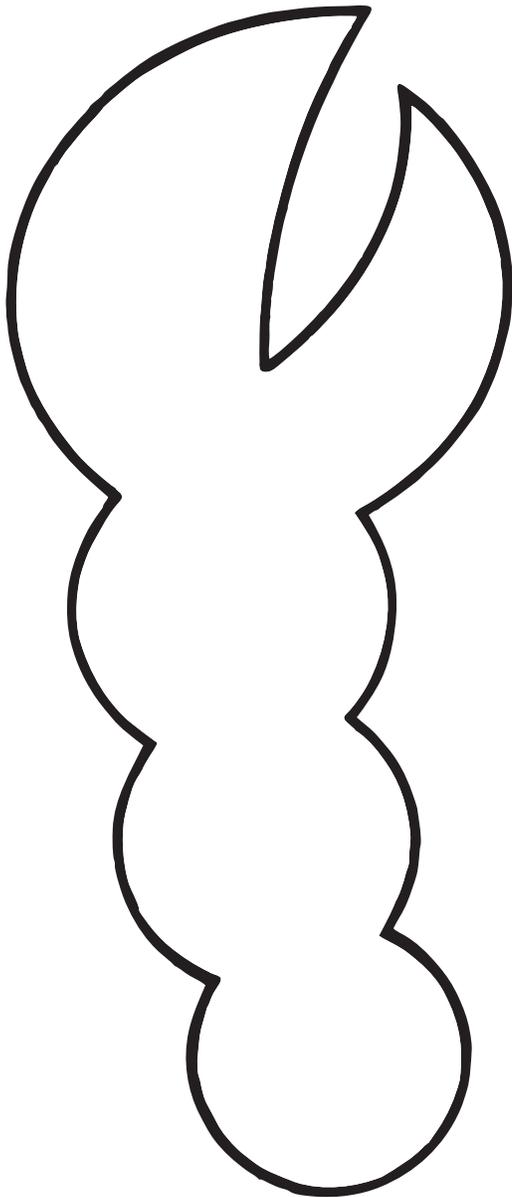


Crab Patterns

Eye Stalks



Pinchers



Eyes

