



Glue Crew Math

Lesson Plan

Centered on the Three R's of Reduce, Reuse and Recycle

Grades: K–4. Please make changes to lessons and appendices as desired to fit the needs of your classroom.

Lesson Duration: 1-3 Days

Standards: See complete list below.

Objectives:

- Students will compare and contrast data
- Students will practice and apply various math skills
- Students will predict and analyze data

Materials:

- Empty Elmer's Glue Sticks and Glue Bottles
- Scales, rulers, counters, meter sticks, shoe boxes, gallon buckets, small mixing bowls
- Appendix A - Glue Crew Math Booklet

Directions: Copy and assemble Appendix A for each student.

Lesson:

Before you recycle your empty Elmer's Glue sticks and glue bottles, help sharpen your students' math skills using these fun activities. In this lesson, students will use the empties they have collected to predict, count, graph, measure, weigh, compare and contrast.

Copy the handouts in **Appendix A** for each student and walk through the activities together. You might have each student create a booklet of these pages. Add pictures or drawings as time permits to add interest.

This lesson adheres to the following National Education Standards:

Math

Mathematical ideas: Number and operations, representing, comparing, and ordering whole numbers and joining and separating sets, measurement, ordering objects by measurable attributes, data analysis

Number Operations Standard

- understand numbers, ways of representing numbers, relationships among numbers, and number systems;
- understand meanings of operations and how they relate to one another;
- compute fluently and make reasonable estimates.

Measurement Standard

- understand measurable attributes of objects and the units, systems, and processes of measurement;
- apply appropriate techniques, tools, and formulas to determine measurements.

Data Analysis a Probability

- formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them
- Develop and evaluate inferences and predictions that are based on data

Problem Solving

- build new mathematical knowledge through problem solving
- solve problems that arise in mathematics and in other contexts
- apply and adapt a variety of appropriate strategies to solve problems
- monitor and reflect on the process of mathematical problem solving
- organize and consolidate mathematical thinking through communication

Communication

- communicate mathematical thinking coherently and clearly to peers, teachers, and others;
- analyze and evaluate the mathematical thinking and strategies of others;
- Use the language of mathematics to express mathematical ideas precisely.

Connections

- Recognize and use connections among mathematical ideas
- understand how mathematical ideas interconnect and build on one another to produce a coherent whole
- Recognize and apply mathematics in contexts outside of mathematics.



Glue Crew Math

Name _____



Predict-
How many glue sticks did we collect?

How many glue bottles did we collect?

Actual-
Count and record actual amount:

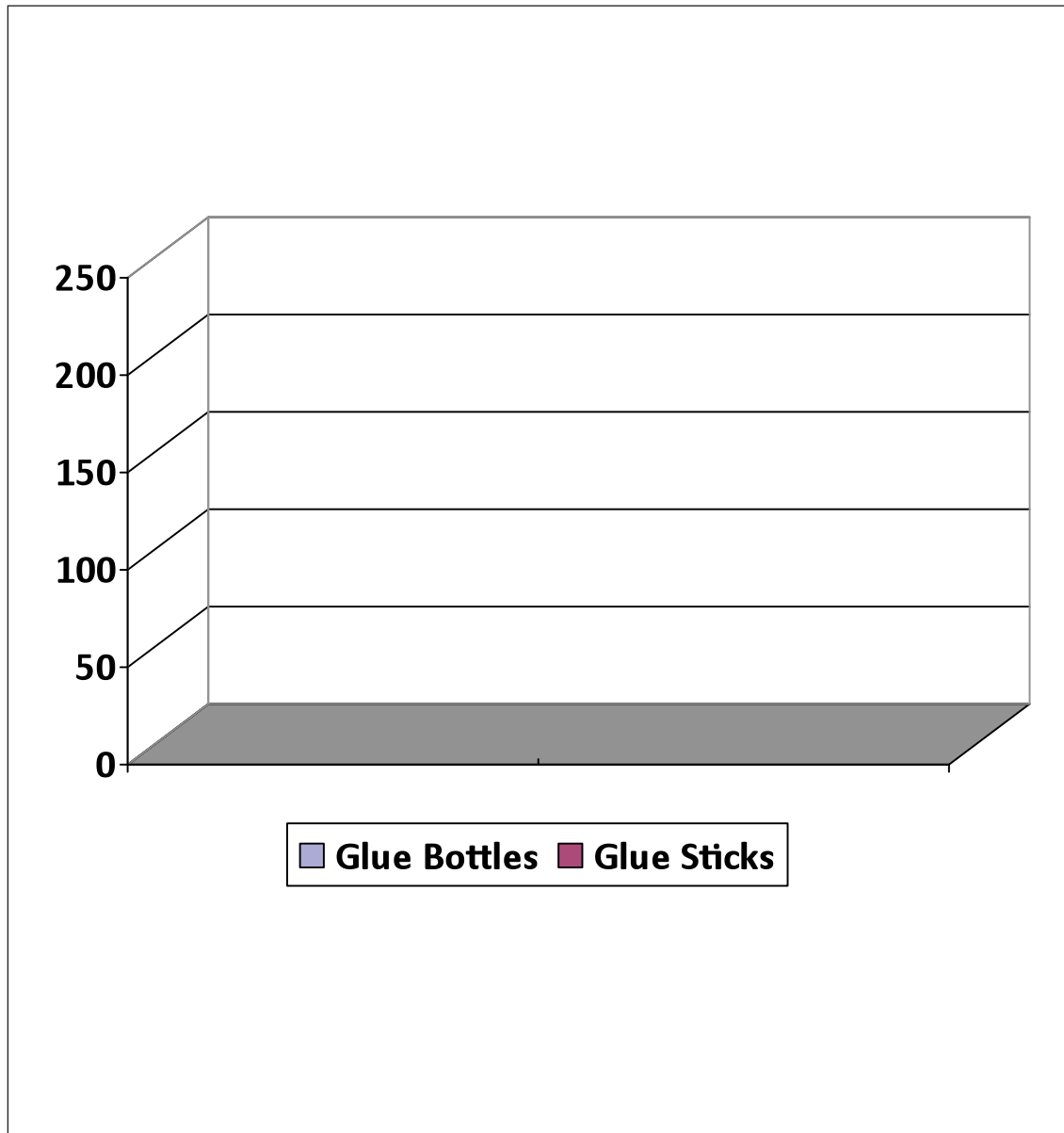
Sticks _____

Bottles _____

Which amount is greater?
Sticks or Bottles

What is the mathematical difference between the amounts of
sticks and bottles? _____

Fill in your graph!





Predict-

Which weighs more an empty glue stick or empty glue bottle?

How much do the total amount of glue sticks you have collected weigh?

How much do the total amount of glue bottles you have collected weigh?

Actual-

Which weighs more an empty glue stick or empty bottle? _____

The total amount of glue sticks weighs _____

The total amount of glue bottles weighs _____

Predict-

If you lined your glue sticks up end to end, how long would the trail of glue sticks measure?

If you lined your glue bottles up end to end, how long would the trail of glue bottles measure?

Actual-

Choose a unit of measure (counting cubes, rulers, students, meter sticks, math books etc....)

What unit of measure will you use?

How many units long is your trail of glue sticks?



Predict-

Circle the type container you are using:

gallon bucket

small mixing bowl

shoe box

How many glue sticks will it take to fill up your container?

Actual

How many glue sticks did it take to fill up your container?

Try another....

Circle the type of container you are using:

gallon bucket

small mixing bowl

shoe box

How many glue sticks will it take to fill up your container?

Actual

How many glue sticks did it take to fill up your container?