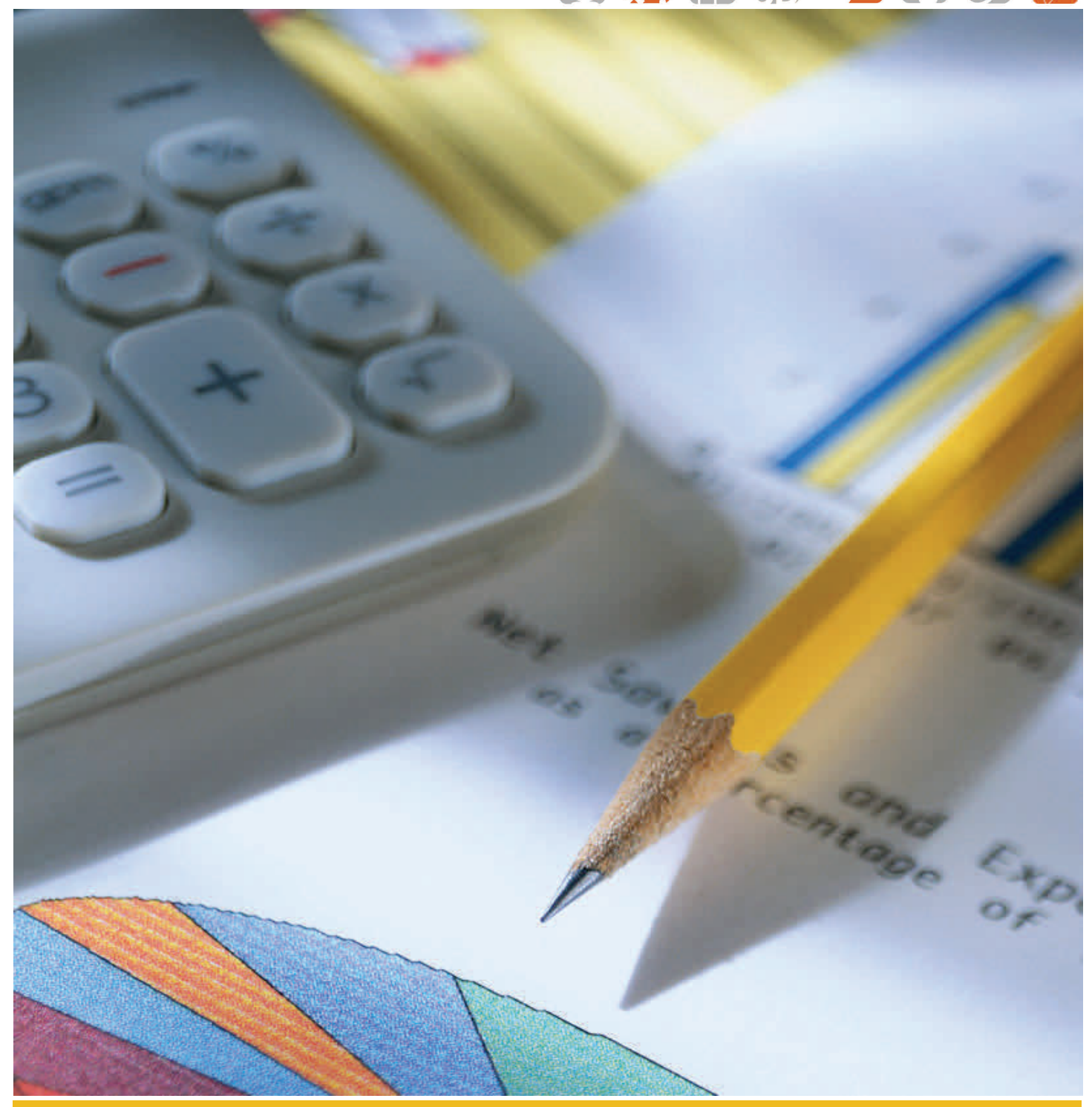


Notes/Reflections:

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Data • Graphs and Charts • Categories • Increments •



Explore math concepts through movement and visual art!

The class will understand what it means to be the data that they collect, and see in bar graphs. Students will become the data, and create their own graphs.

Essential Question: How can you utilize movement and visual images to teach math concepts?

Process

- Students will talk about graphs and what a bar graph is.
- The class will discuss categories, titles, increments, and quantities.
- The teacher will then have the students move their desks to the side.
- The teacher will prompt the student with all the choices, data, and graphs they could be making all day.
 - Students will be given a choice of homework or no homework and asked to stand in a line behind their first choice.
 - Then the choices will continue... have premade choices such as milks (chocolate milk, strawberry, plain, juice), Colors (red, blue, green, orange), Girls & Boys.
- An extension will be to change the value of what a (person) stands for. For example, if J=2, how does this change the increments and scale of the graph?
- As a whole group the students will do addition/subtraction and how many more or less problems.
- Students will then be asked to make their own graphs. Students will need to understand the importance of line to increment correlation for better accuracy, title, categories & data. Continue with pictographs if time allows.

Assessment

- Students will comprehend the concepts of bar graphs, keys, scale and increments.
- Students will use these concepts to read data and transfer it to bar graphs.
- Students will control their energy and use space & body to model math concepts.

Materials

- Category labels
- paper
- colored pencils or crayons
- pencil

Vocabulary

Bar Graph

A diagram in which the numerical values of variables are represented by the height or length of lines or rectangles of equal width

Pictograph

A pictorial representation of statistics on a chart, graph, or computer screen

Data

Facts and statistics collected together for reference or analysis

Increments

The process of increasing in number, size, quantity, or extent

Scale

A graduated range of values forming a standard system for measuring or grading something

Key

A key is used to identify the number of categories present in a graph. It is also called a legend. A key on a pictograph identifies how many each picture stands for.

Classroom Tips

This is great for whole group, small group work, and easily differentiated. Students can also collect data by surveying the school.

Common Core Georgia Performance Standards

MATHEMATICS

GRADE 3

MCC3.MD.3: Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

Georgia Performance Standards

DANCE

GRADE 3

D3FD.1: Identifies and demonstrates movement elements, skills, and terminology in dance

D3FD.2: Understands and models dance etiquette as a classroom participant, performer, and observer

D3CR.1: Demonstrates an understanding of creative and choreographic principles, processes, and structures

VISUAL ARTS

GRADE 3

VA3MC.3: Selects and uses subject matter, symbols, and ideas to communicate meaning.

National Standards

DANCE

Standard 1: Identifying and demonstrating movement elements and skills in performing dance

Standard 4: Applying and demonstrating critical and creative thinking skills in dance

Standard 7: Making connections between dance and other disciplines

VISUAL ARTS

Standard 1: Understanding and applying media, techniques, and processes

Standard 6: Making connections between visual arts and other disciplines