

Unit 12: Classify and Sort Data

Content Area: **Mathematics**
Course(s): **Math K**
Time Period: **May**
Length: **2 weeks**
Status: **Published**

Unit Summary

In this unit, students will learn that some attributes used to compare objects are color, size and shape as well. Students will be able to describe attributes and answer questions. Students will be able to read a simple graph.

Standards

MA.K-12.4	Model with mathematics. Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.
MA.K.MD	Measurement and Data
MA.K.MD.B.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP2.1	Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.8.1.2.A.CS2	Select and use applications effectively and productively.

Student Learning Objectives

Students will learn to...

- classify and count objects by color.
- classify and count objects by shape.
- classify and count objects by size.

- make a graph to count objects that have been classified into categories.
- read a graph to count objects that have been classified into categories.
- solve problems by using the strategy use logical reasoning.

Essential Questions

- How does sorting help you display information?

Enduring Understandings

Students will understand that...

- sorting objects helps display information.

Application

Students will be able to independently use their learning to...

- read a simple graph.
- sort information and create a simple graph.
- ask a question, create a recording procedure, and finally summarize and analyze the data they collected to answer the question.
- use physical objects and then manipulatives, such as connecting cubes, to make graphs.
- explain their reasoning about why objects do or do not belong to a particular group.
- sort using their own criteria (one or more attributes), and explain to others how they made their decisions.

Skills

Students will be skilled at...

- sorting objects by color.
- sorting objects by size.
- sorting objects by shape.
- reading a simple graph .

