

## Our Learning Goals:

- Objects can be sorted using more than 1 attribute.
- Data can be represented in multiple ways.
- Data can be used to solve problems.

## Sorting and Surveys

In Unit 7, the learning builds on the work with counting, sorting and classifying, and representing information that your student has done all year long.

This unit has 4 Mathematical Emphases:

1. Counting and Quantity – developing strategies for accurately counting a set of objects by ones
2. Representing data – seeing the one-to-one correspondence between a set of data and a representation of this data set
3. Sorting and Classifying – grouping data into categories based on similar attributes and sorting the same set of data in multiple ways
4. Carrying out a data investigation – choosing a survey question, collecting and keeping track of survey data, interpreting results of data, and using that data to solve a problem

The Unit will also focus on comparing quantities to determine which is more or less. Students need to continue to count sets of objects and should know what is one more, one less, two more, or two less. See Activities for ideas at home to encourage this concept through the summer.

## How Can I Help My Student

As you are sorting at home ask children to come up with new categories for the sort. Some categories that children may come up with are: *things with holes, things with points, plastic junk, metal stuff, our red collection, my cars, or these are all wooden.*

Be sure to have your student explain his/her thinking to you. Students are beginning to be able to use generalizations in their observations. They are coming up with attributes that make sense to them.

## What Activities Can I Do At Home?

**Sorting** – Your child can sort collections of objects you have at home: coins, stamps, toys in the toy chest, containers, even laundry. He or she can sort just for fun or to organize some things in your home. As your child sorts the collection, ask him or her questions about the sorting: “How are some of the bottle caps the same? How could you sort them into groups? What is the same about all of these?” Is there a different way you could sort them?”



**Surveys** – Student are learning to conduct their own surveys. Help your child take a survey of your family, friends, or neighbors. Your child can choose a question that is of interest to him or her, create a recording sheet to record responses, and record their responses. Afterwards, ask your child some questions about the results of the survey. “What did you find out? How many people said they liked the ocean? How many people didn’t? Were you surprised by people’s responses?”

**Counting to Collect Data** – You can ask your child to collect data about the number of certain items in your home: How many forks do you have? Knives? How many windows? Doors? How many chairs? How many feet are there in your home?

**One-Less Than Dominoes** – When children count, they have no reason to reflect on the way one number is related to another. The goal is only to match numbers words with objects until they reach the end of the count. To learn that 6 and 8 are related by the twin relationships of “two more” and “two less than less” requires reflection on these ideas within tasks that permit counting. For this game you can use dominoes. Playing in the usual way, but instead of matching ends, a new domino can be added if it has an end that is one less than the end already on the board. A similar game can be played to two less, one more, or two more.

## Math and Literature Connections

Anno, Mitsumasa. **Anno's Flea Market.**

Baylor, Byrd. **Everybody Needs a Rock.**

Baylor, Byrd. **Guess Who My Favorite Person Is.**

Blake, Jon. **Daley B.**

Brown, Ruth. **The Picnic.**

Stuart Murphy. **Tally O'Malley.**

Loreen Leedy. **Great Graph Contest.**

Trudy Harris. **Tally Cat Keeps Track**

Amy Krouse Rosenthal. **Duck! Rabbit!**