

All About Data

What Is Data?

Data is information that we collect to answer questions or solve problems. For example, when setting the table, we find out how many plates and cups are needed. We can organize data into a list or graph to help us interpret it and draw conclusions.

Why Is Learning About Data Important?

Data helps people understand the world around them and make decisions. We gather information to answer questions such as:

- “Are there enough cookies for everyone?” Count how many people and cookies there are.
- “Should I wear a jacket today?” Check the weather forecast and then decide.
- “What type of ice cream should we get for a party?” Survey people’s favorite flavors to find out.

What Do Children Need to Know About Data

Children need to know how to:

- **Collect data.** Count how many people are in line to use the slide and the swings to see which one has a shorter wait.
- **Sort or organize objects by different information.** Toys can be organized by their color, size, or starting letter.
- **Ask questions that can be answered by collecting information.** “Do we have more forks or spoons in our kitchen drawer?”
- **Organize and represent information.** Preschoolers and early elementary students can use tally marks or simple bar graphs to show what colors of cars they see.

How Can We Help Children Learn About Data?

The main way to support children’s learning is to practice gathering information, sorting, and making decisions in daily life, especially around topics that are interesting and meaningful to them.

Babies and Toddlers

- **Sort objects by color or size or type.** Use blocks, laundry, or things in the kitchen.
- **Talk aloud about data you can collect.** “How many segments are

in an orange?” “How many people have blue as a favorite color?”

- **Talk about similarities and differences between objects:** “That car is yellow and that car is blue. They both have four wheels.”

said yes or no?” “Which park do most of our friends want to go to?”

- **Collect data on physical challenges.** “How many jumps can you do in one minute?” Then time a few other family members or neighbors jumping, or time your child jumping on different days or times. Discuss the data.



Red Apples Green Apples
III-III III-II