# Types of Studies and Randomization

## Today's Standard

HSS.IC.B3 - Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.

## Real-World Applications for this Standard

Designing a survey to understand student preferences.; Conducting an experiment to test a new drug's effectiveness.; Analyzing observational data to study environmental impacts.

## Today I Learned

Today, we learned about different types of studies like surveys, experiments, and observations. We also talked about why mixing things up randomly is important in these studies.

## Common Stumbling Blocks

Some kids think all studies are the same, but they are not. Surveys ask questions, experiments test things, and observations watch what happens. Also, mixing things up randomly helps make the study fair.

## Quiz Me

- What is a survey?
- What is an experiment?
- What is an observation?
- Why do we mix things up randomly?
- Can you give an example of a survey?

## Help Me

When we study things, we can ask people questions (survey), test something (experiment), or just watch what happens (observation). Mixing things up randomly helps us get fair results. For example, if we want to know what ice cream flavor kids like, we should ask a random group of kids.