

## Summary of learning goals

- Students sort, classify and represent data. They make observations and simple inferences based on the data.

### Australian Curriculum: Mathematics (Foundation)

**ACMNA005:** Sort and classify familiar objects and explain the basis for these classifications.

Copy, continue and create patterns with objects and drawings.

**ACMSP011:** Answer yes/no questions to collect information and make simple inferences.

## Summary of lessons

### Who is this sequence for?

- This sequence has been written as an introduction to statistics and so students do not need to have prior experience in data collection and reading data. Students should be able to count with one-to-one correspondence to at least 20.

### Lesson 1: Shoes

Students gather and represent data on the shoes that they wear to school. The class works together to sort their shoes into different categories of their choosing, and organises and represents the data using a picture graph. Students then use the data in the graph to answer questions and make simple inferences.

## Reflection on this sequence

### Rationale

This sequence focuses on developing understanding of variation in data through a meaningful context.

By observing and discussing how the type of shoes they wear varies on different days or at different times of the year, students appreciate that variation is natural. By representing their data graphically, they can begin to appreciate the extent of the variation and what is expected.

The focus on variability is what distinguishes statistics from mathematics.



#### reSolve mathematics is purposeful

- The lesson introduces the fundamental concept of variation in statistics.
- The context of shoes is personally significant to students and enables students to meaningfully analyse the data and make inferences.



#### reSolve tasks are inclusive and challenging

- The collaborative nature of this task provides access for all students.
- Challenge is provided to students as they are asked to make inferences and draw conclusions of varying complexity based on the data presented.



#### reSolve classrooms have a knowledge-building culture

- The task is completed as a class, allowing students to learn from others' contributions. This allows students to build on the collective knowledge of the class while also extending their individual understanding.