

# **WORKING WITH DATA**

### INTRODUCTION

The world as we know it is constantly throwing a huge amount of information at us. We call this information data. To understand and explain this world around us, it is important to be able to identify, collect and represent all the data that is available. Knowing how to represent and interpret data will enable learners to find meaningful solutions to problems.

**Learners begin** by understanding and classifying data by using tally marks, pictographs, bar graphs, and pie charts.

**Learners exit this module** with an understanding of different kinds of data, different methods of representing data, the importance of data collection and interpretation. They present given data using the most appropriate data representation methods.

This module is a part of the "UNDERSTAND - THE SCIENCE THAT RUNS THE WORLD" series.

## **MODULE DETAILS**

- Series 1: Understand The Science That Runs The World
- Module 1: Working with Data
- Student Accomplishment Level: 1

Grade Group: 1-3 Number of Sessions: 8 Session Duration: 60 min

#### **SESSION EXPERIENCE**

- **1. Tuning in:** Understand the module structure and goals. Learn the tool used in the module such as Bricks.
- **2. Group and Sort:** Classify and define objects according to their characteristics.
- **3. Tally Ho!** Depict countable data in the form of tally marks.
- **4. Show me the Data:** Use pictographs and pictograph keys to depict data.

- **5. Behind Bars:** Build bar graphs given a set of data. Interpret bar graphs to analyze data.
- **6. Life of Pie:** Depict given data in the form of pie charts. Understand when pie charts are needed.
- **7. The Represent Data Challenge:** Depict given data in the most appropriate way.
- **8. How did I do?:** Reflect on the learnings from the module: Understand grouping, sorting of data, represent data through different methods of representing data. Present work done to peers.

## **Learning Objectives:**

Learners will:

- 1. Understand grouping and sorting of data, understand how to use tally marks to keep count.
- 2. Represent and analyze data through pictographs and bar graphs.
- 3. Understand when and how to use pie chart.
- 4. Apply math concepts such as shapes, numbers, colors and sizes
- 5. Follow instructions, conduct research, solve problems and create tangible artifacts.
- 6. Engage in active collaboration and communication.

