

4565: Computing Foundations for a Digital Age

Unit 4

Day 3 Lesson Plan: The Candy Data Challenge (Part 1)

Objective

Students will collect, organize, and analyze real-world data using visual representations to identify patterns and make predictions.

Word Bytes

- **Data Collection** – Gathering information to study or analyze.
- **Attributes** – The features or properties being measured (e.g., color, size).
- **Data Visualization** – Turning data into graphs or charts to understand it easily.

Materials

- Small packages or bowls of mixed candy (e.g., M&Ms, Skittles)
- Paper towels or small sorting trays
- Digital or physical scales (optional)
- Graph paper or devices with spreadsheet/chart tools (e.g., Google Sheets)
- [Candy Data Collection Sheet](#) (for tallying and recording)

Activities

Hook: Candy Class Predictions

- Ask students to guess which candy color will appear the most and least in their bag or sample.
- Record a few predictions on the board to revisit later.

Mini-Lesson: How to Collect & Organize Data

Model how to:

- Count and categorize candy by attributes (e.g., color, size)
- Record frequencies clearly
- Consider weight (optional extension)

Hands-On Activity: Candy Sorting & Tallying

- Students sort their candy and complete the Candy Data Collection Sheet.
- Students double-check their data for accuracy and compare with a partner.

Discussion: What Does the Data Show?

- Which color appeared the most?
- Were the class predictions accurate?
- What patterns are emerging?

Extension (Optional):

Weigh the candy and compare counts vs. weight. Ask: Does a heavier bag always mean more pieces?

Word Bytes Dictionary Update

Students add today's terms with examples:

- Data Collection – Counting how many of each color are in a candy bag.
- Attributes – Candy color or size.
- Data Visualization – Making a pie chart to show how many red, green, and blue candies there are.