

Unit Title: Techno Candy (Sheets & Docs)**Grade Level: 4****Subject Area:** Technology**Duration/Length/Number of class periods:** 12 (25 minute) class periods**Description:**

Students develop a plan to boost candy sales. They investigate a problem by conducting a survey and researching candy packaging. A spreadsheet is used to organize, calculate, and graph data. Based on evidence, students recommend a solution in a written report.

Established Goals (National, State, Local): ISTE Standards for Students

1d. Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.

5b. Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

6c. Students communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.

What Enduring Understandings are desired?

- Accurate data collection and analysis have an affect on community problem solving and decision making.
- Product design impacts consumer decisions.

What Essential Questions will be considered?

- To what extent does data collection and analysis influence decision making?
- How can inaccurate reporting of data sway decision making or beliefs?
- How can product branding affect decision making?

Students will know / be able to:

- Students will conduct a survey and organize data on a spreadsheet.
- Students will use spreadsheet skills such as formatting cells, ranges, formulas, and graphing.
- Students will graph data and interpret results.
- Students will report their results to an audience.

Description <i>Units must include at least one of each formative, summative, introductory activity and learning activity. Check the appropriate box; one per row.</i>	Fo rm ati ve	Su m ati ve	Intr odu ctor y Acti vity	Lea rnin g Acti vity	Stu den t Tec hno logy Use d	Teac her Tec hno logy Used	ISTE Stan dard s
Day 1: Introduction to Spreadsheets			x			x	
Day 2: Exploring Spreadsheets Activity (rename, columns, rows, label cells, add data, move from cell to cell, select multiple cells)				x	x		1d
Day 3: Understand the Problem (what is the problem and make a plan to solve it)				x		x	
Day 4: Conduct a Survey				x			5b
Day 5: Record Survey Results in a Spreadsheet (add sheet title, organize survey results, merge cells, format text and cell, alignment, adjust row height and align and resize vertically, outline table with borders)	x			x	x		1d, 5b
Day 6: Spreadsheet Skills Summary and Spreadsheet Quiz	x						1d
Day 7: Calculate Survey Data and Graph Survey Results				x	x		5b
Day 8: Research Candy Packages/Content				x			
Day 9: Record and Organize Research Results				x	x		1d, 5b
Day 10: Comparison Chart Creation				x	x		
Day 11-12: Solution Report (Use Google Docs - Explain survey results, include graph, explain research results, defend plan for solution)		x			x		5b, 6c
Spreadsheets Unit Rubric		x					

Materials, tools and resources: Google Sheets & Docs, Student Workbook (in Google Classroom), Candy, TechnoCandy Technology Unit,
Unit Plan Author: Brenda Baird, Princeton Intermediate School
Additional credit given to: TechnoKids K-12 Technology Projects