TECHNOCandy

Teacher Guide

Lessons for Elementary Students: Grades 3-6

Technology Course using

Excel & Word

Formulate a plan to boost sales.

In this course, 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 the evidence students recommend a solution in a written report. Extension activities challenge students to explore formulas, learn advanced graphing techniques, or design a candy package.

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Introduction

This section provides valuable information about teaching TechnoCandy. It includes a description of the Teacher Guide, as well as an overview of the course. In addition, there are ideas for implementation and technology integration.

For additional guidance, open the course in TechnoHub and select Get Started to access preparatory steps, resource list, and scheduling timetable.

TechnoCandy Overview

TechnoCandy Course Outline

Technology Integration Ideas

TechnoCandy Overview

In this course, 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 the evidence students recommend a solution in a written report. Extension activities challenge students to explore formulas, learn advanced graphing techniques, or design a candy package.

➢ In Session 1, students are introduced to Microsoft Excel and spreadsheet terminology. To learn about the program, students play Excel Bingo. This game has students identify cell references, navigate in a worksheet, enter data, fill cells with color, and select multiple cells. It is a fun way to learn essential spreadsheet skills.

➢ In Session 2, students are given a problem to solve. A candy company is losing sales. Their number one candy is no longer number one. A study of the problem shows that children like the taste of the candy, but they say it is boring to eat because the colors are not fun. Students conduct a survey to learn more about what colors kids like. The survey results are entered into a Microsoft Excel spreadsheet. The data will be analyzed in upcoming sessions.

➢ In Session 3, students produce a graph of their survey results. They make a bar graph. The color of the bars, chart area, and titles are then formatted to look attractive. Upon completion, students print the worksheet so that they have a complete record of their survey results. They will use this information in upcoming sessions to develop a plan to make the candy number one again. An optional activity, explains how to copy the survey worksheet and transform the data into different graphs to determine the most suitable type.

➢ In Session 4, students continue gathering information for the candy company by studying packaging. Students estimate the number of colored candies contained in the average package of a chosen candy and record their predictions in a spreadsheet. Students then count and record the actual data. Using the sorting feature of Microsoft Excel, data is displayed in different views. Furthering their spreadsheet skills, students customize text within cells and add an image to create a professional looking document.

➢ In Session 5, students make a comparison chart of the candy packaging research results. Using the skills learned in previous sessions, they make a bar graph. Once it is finished, they format the bar color, background, and labels so it looks great. Students then study the graph and summarize the results. An optional extension activity explores practical applications for a pie and line graph.

➢ In Session 6, students develop a plan to make the candy number one again. They explain their idea in a report. The document summarizes the research findings and outlines a solution to the problem. If time permits an optional extension activity has students create a new package design for candy. It should attract customers' attention causing them to grab it off the store shelf.

TechnoCandy Course Outline

Purpose: Use spreadsheets to organize, calculate, and graph data. Apply reasoning to solve problems and explain decisions in a report.

Objectives: (see Appendix A: Skill Summary)

- connect mathematics to everyday life
- investigate a problem using spreadsheets
- collect data using a survey
- organize information into a table
- calculate data using formulas
- graph data and interpret results
- predict an outcome using logical reasoning
- conduct an experiment to test predictions
- classify and sort data
- develop a plan based on the evidence
- justify solutions in a written report
- find enjoyment in mathematics

Preparation:

- Install Microsoft Office 365
- Prepare Bingo tags and print scoresheet.
- Share Candy folder with students
- Download Flashcards and Tool Summary from TechnoHub (optional)

Materials:

- Assessment: Report Checklist, Spreadsheet Quiz Report Marking Sheet, Skill Summary,
- Candy folder
  - o Sample Spreadsheet and Report
  - o Package Template
- Candy Packages (see Notes)*
- Bingo Resources
- Parent Letters and Certificate
- Flashcards and Tool Summary (optional)

Summary of Activities:

- Understand the practical application of spreadsheets. Set a goal for learning.
- Explore Excel to understand spreadsheet terminology and acquire basic skills.
- Play Spreadsheet Bingo to practice identifying cell references and basic formatting skills.
- Develop an understanding of the problem. Formulate a plan to collect information.
- Conduct a survey about color preferences.
- Organize survey results in a spreadsheet. Format the data to make it easy to read.
- Calculate data using the *Sum* function.
- Graph survey data. Interpret the results.
- Investigate candy packaging. Record predictions and actual amounts of colored candies.
- Organize research results in a new sheet. Calculate totals using the *Sum* function.
- Sort data. Create a comparison graph. Analyze research findings.
- Recommend a solution to the problem based on the evidence. Use graphs to support reasoning.
- Complete a checklist. Submit report.

Extension Activities:

- Have Fun with Cell References: Foster creativity and an enjoyment of a spreadsheet program.
- Experiment with Sum: Compare various calculations methods of summing data.
- Explore Chart Types: Compare line, pie, and bar graphs.
- Explore Pie and Line Graphs: Make different types of graphs.
- Draw Packaging in PowerPoint: Design a candy package using shapes, text, and images.

Assessment:

- Self-Evaluation Checklists (Report Checklist – Assignment 13)
- Teacher Evaluation (Spreadsheet Quiz, Report Marking Sheet, TechnoCandy Skill Summary)

Notes:

- This course focuses on developing basic spreadsheet skills. It is designed for beginners.
- Students need packages of multicolored candy to complete Assignment 9. Candy packages may be purchased for individual students, pairs, or small groups. If candy is unsuitable, prepare 'packages' by placing a variety of colored objects into a bag and writing the total amount of 'candies' on the outside of the container.
- The report is written using a template to help students organize their ideas and accommodate children with emerging keyboarding skills.

Technology Integration Ideas

Have your students learn through problem-solving. The activities in TechnoCandy connect mathematics to a real-world situation that is simplified to make it understandable to children. Students are challenged to develop a solution that will increase candy sales. This course can be used to develop critical thinking, teach inquiry and analytic research methods, and build problem solving strategies. There are several ways to integrate TechnoCandy into curriculum:

- *Mathematics Problem Solving Unit*
  Make mathematics and spreadsheets enjoyable. Engage your students in a business problem that they would like to solve. The activities in TechnoCandy use a problem-solving model. Students gain an understanding of the problem, investigate the issue, analyze the findings, and recommend a solution based on the evidence.

- *Mathematics Graphing Unit*
  Teach graphing techniques in a meaningful way. TechnoCandy includes activities for displaying data in a single and double bar graph. By interpreting the graphs students make decisions based on real world data that they collected.

- *Spreadsheet Unit*
  TechnoCandy can be included as part of a computer course or class. Students learn basic skills such as how to manage sheets, format cells, calculate data, and graph cell ranges. Extension activities make learning spreadsheets fun by playing Bingo and drawing spreadsheet pictures. For older students, there are activities to develop advanced graphing skills and a deeper understanding of addition formulas.

- *Entrepreneurship Unit*
  Incorporate TechnoCandy as part of a business studies, finance, or entrepreneurship course. The scenario allows students to investigate practical solutions to an everyday problem that many business owners must overcome.

- *Integrated Technology Unit*
  Develop computer, mathematics, language, and visual arts skills. Use Excel to analyze data, Word to report findings, and PowerPoint to design a candy package.

Understand the Big Picture

Not sure where to integrate TechnoCandy? View samples to gain a better understanding of the course. The *Spreadsheet* sample is a completed spreadsheet of survey results and candy package research. The *Report* sample describes a solution.

Session 1
About Microsoft Excel

In this session, students are introduced to Microsoft Excel and spreadsheet terminology. To learn about the program, students play Excel Bingo. This game has students identify cell references, navigate in a worksheet, enter data, fill cells with color, and select multiple cells. It is a fun way to learn essential spreadsheet skills.

Assignment 1: Spreadsheets and You

Assignment 2: Explore Spreadsheets

Assignment 3: Play Spreadsheet Bingo

Session 1 Extension Activity: Have Fun with Cell References

This is a preview of the teacher guide.
Pages have been omitted.

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Assignment 3 Play Spreadsheet Bingo

Practice your spreadsheet skills with a game of digital Bingo!

Your teacher needs to print the *Bingo* document BEFORE you play.
It has the Bingo score sheet and tags you need for the game.

The BINGO document is in the TechnoCandy Resource folder.
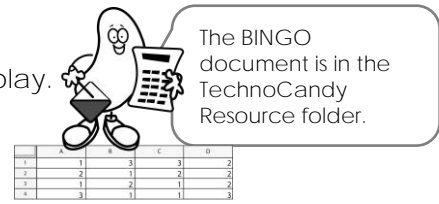
What is Spreadsheet Bingo?

Spreadsheet Bingo is a game where the goal is to be the first person to fill four horizontal, vertical, or diagonal, cells with color.

How to Play

Spreadsheet Bingo is played with an electronic game card.
On the game card are the numbers 1, 2, or 3.

	A	B	C	D
1	1	3	3	2
2	2	1	2	2
3	1	2	1	2
4	3	1	1	3

A caller picks out a Bingo tag. On the tag is a cell name with a number.
The caller reads what is on the tag.

In cell B2, the number 1.

Your teacher needs to print the Bingo tags, cut them out, and put them in a container.

B2 - 1
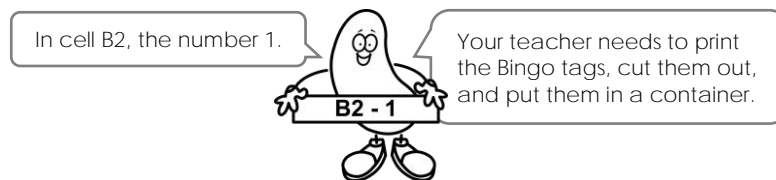
Find the cell. If it has the number called, you can fill that cell with color using *Fill Color*.

	A	B	C	D
1	1	3	3	2
2	2	1	2	2
3	1	2	1	2
4	3	1	1	3

Theme Colors

Standard Colors

No Fill

More Colors...

The caller uses the score sheet to track the numbers that have been called.
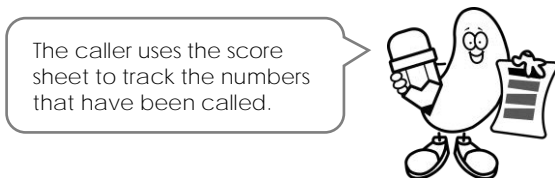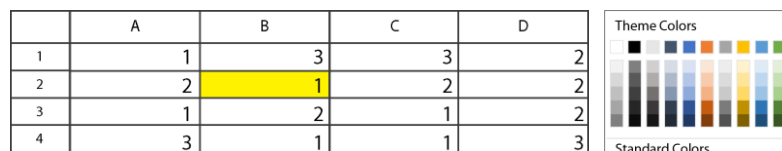
The first person to fill four cells in a row with color, is the winner.

	A	B	C	D
1				
2				
3				
4				

Diagonal

	A	B	C	D
1				
2				
3				
4				

Vertical

	A	B	C	D
1				
2				
3				
4				

Horizontal

Make a Spreadsheet Bingo Card

You need to make your bingo card.

Get ready to play.
Follow the instructions to make your own bingo card.
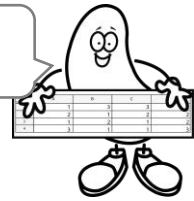
Open Excel and Rename the Workbook

▷ Open Excel.
Click *Blank workbook.*

▷ Click *Save* on the Quick Access Toolbar.

▷ Go to the place where you store your files.
In the File name box, type Bingo.

File name:	Bingo
Save as type:	Excel Workbook

▷ Click *Save.*

Make the Bingo Card

▷ Fill cells from A1 to D4 with the number 1, 2, or 3.

- o Select A1. Type the number 1, 2, or 3.
- o Press TAB to select B1. Type 1, 2, or 3.
- o Press TAB to select C1. Type 1, 2, or 3.
- o Press TAB to select D1. Type 1, 2, or 3.
- o Select cell A2. Type 1, 2, or 3.
  Use your skills to complete the card. It should look something like this:

	A	B	C	D
1	1	3	3	2
2	2	1	2	2
3	1	2	1	2
4	3	1	1	3

Play Spreadsheet Bingo

Now play the game. Your teacher is the caller. When he or she calls out a cell name and number look at your bingo card. Do you have the same number in the cell?

If you do, fill it in with color using *Fill Color.*

When you have four colored cells in a row, (←→, ↕, ↖, ↗) say "Bingo!"
You just may be the winner!

To play a new game, select the cells. Click the *Fill Color* arrow and pick *No Fill.*
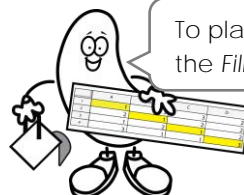
Save and Exit Excel

This is a preview of the teacher guide.
Pages have been omitted.

Session 2
Conduct a Color Survey

In this session, students are given a problem to solve. A candy company is losing sales. Their number one candy is no longer number one. A study of the problem shows that children like the taste of the candy, but they say it is boring to eat because the colors are not fun. Students conduct a survey to learn more about what colors kids like. The survey results are entered into a Microsoft Excel spreadsheet. The data will be analyzed in upcoming sessions.

Assignment 4: Understand the Problem

Assignment 5: Conduct a Survey

Assignment 6: Record Survey Results in a Spreadsheet

Assignment 7: Calculate Survey Data

Session 2 Extension Activity: Experiment with Sum

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Assignment 6 Record Survey Results in a Spreadsheet

You have surveyed people to find the candy colors they like and the colors they do not like.

Put the survey results into a spreadsheet.
This will make it easier to study the information.
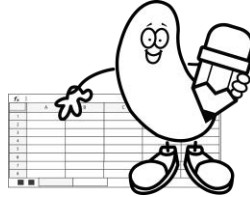
Open Excel

▷ Open Excel.
Click *Blank workbook.*

Add the Sheet Title

▷ In cell A1, type Color Survey.
Press ENTER.

Organize Survey Results

▷ In cell A3 type Colors.

▷ In cell B3 type Votes.

▷ In cell A4 type a color name from the Assignment 5 survey. Press ENTER.

▷ In cell A5, type the next color. Repeat until all the colors are listed.

▷ Select cell B4, type the number of votes for the color in A4. Press ENTER.

▷ Continue to add survey data.

	A	B
1	Color Survey	
2		
3	Colors	Votes
4	Blue	5
5	Red	8
6	Orange	3
7	Yellow	4
8	Green	1
9	Purple	4
10	Black	7
11	Brown	3
12	Pink	2

Merge Cells for the Survey Title

▷ Select A1, hold down the SHIFT key, and click E1.

▷ Click *Merge & Center.*
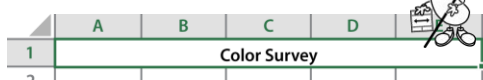
Merging cells joins them together as one big cell. This makes a title look great.

	A	B	C	D	
1			Color Survey		

Format the Appearance of the Title

▷ Select the title. Make the title easy to read:

- o Click the *Font* arrow. Pick an option. `Calibri`

- o Click the *Font Size* arrow. Pick a number. `11`

- o Apply a style. Click *Bold* **B**, *Italic* I, or *Underline* U.

Change the Font Color and Fill a Cell

▷ Select the cell with the title.

▷ Click the *Fill Color* arrow. Pick a color from the palette.

Theme Colors

Standard Colors

No Fill

More Colors...
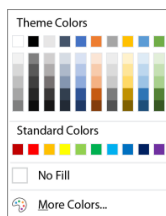
Color can be used to make titles and headings stand out.

▷ Click the *Font Color* **A** arrow. Pick a color from the palette.

Align the Title

▷ Select the title cell.

▷ Explore the horizontal alignment options:

Pick *Align Left* ≡, *Center* ≡, or *Align Right* ≡.

Adjust Row Height and Align Vertically

▷ Position the mouse pointer between row headings 1 and 2. Drag down.

▷ Explore the vertical alignment options:

Pick *Top Align* ≡, *Middle Align* ≡, or *Bottom Align* ≡.
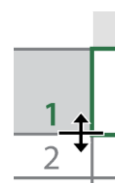
Outline the Table with Borders

▷ Select the survey table. For example, cells A3:B12.

▷ Click the *Borders* ⊞ arrow.
Pick *All Borders.*

Borders
⊞ Bottom Border
⊞ Top Border
⊞ Left Border
⊞ Right Border
⊞ No Border
⊞ All Borders
⊞ Outside Borders
⊡ Thick Outside Borders
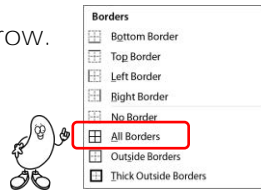
Resize Column Width

▷ Place the mouse pointer between column headings A and B.

▷ Click and drag or double click to change the size.

A ↔ **B**
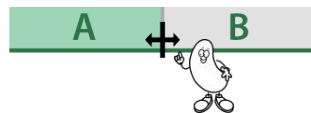
Use Skills to Format the Survey Data

	A	B	C	D	E
	Color Survey				
1					
2					
3	**Colors**	**Votes**			
4	Blue	5			
5	Red	8			
6	Orange	3			
7	Yellow	4			
8	Green	1			
9	Purple	4			
10	Black	7			
11	Brown	3			
12	Pink	2			

Make the information easy to read.
Spreadsheet Suggestions:

✓ Fill the headings with color. 🖌

✓ Align the votes to the center. ▤

✓ Apply bold to the headings. **B**

Save a Workbook and Exit Excel

▷ Click *Save* 💾 on the Quick Access Toolbar.

▷ Go to the place where you store your files.

▷ In the File name box, type Candy Company Name.

▷ Click Save.

▷ Click *Close.* ✕

File name: Company Name
Save as type: Excel Workbook
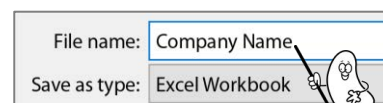
You picked the name
in Assignment 4.

This is a preview of the teacher guide.
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Session 3
Graph the Color Survey

In this session, students produce a graph of their survey results. They make a bar graph. The color of the bars, chart area, and titles are then formatted to look attractive. Upon completion, students print the worksheet so that they have a complete record of their survey results. They will use this information in upcoming sessions to develop a plan to make the candy number one again. An optional activity, explains how to copy the survey worksheet and transform the data into different graphs to determine the most suitable type.

Assignment 8: Graph the Survey Results

Session 3 Extension Activity: Explore Chart Types

Assignment 8 Graph the Survey Results

What color candy do people like the most? Find out!

Make a graph of the candy color survey results.

A graph is a picture of information.

A column graph uses bars to show numbers. The taller the bar, the more people like the color. The shorter the bar, the less people like the color.
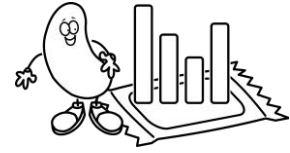
Open Candy Workbook in Excel

Create a Column Chart

▷   Select cell A4. It has the *first color name*.

▷   Hold the SHIFT key. Select the cell in column B with the last vote (above the formula).

Select the cells to include in the graph.
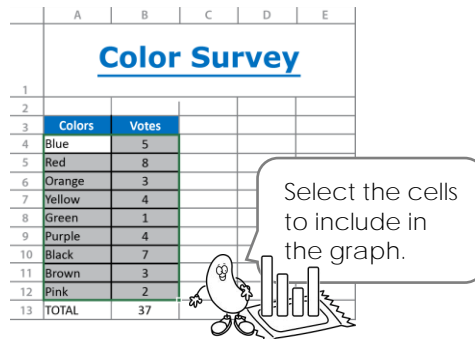
▷   Click the Insert tab and choose *Column* from the *Charts* group.

▷   Choose *Clustered Column* from the gallery.
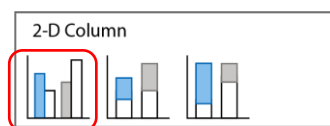
Move and Resize the Graph

▷   Click and drag the graph BESIDE the *Survey Results* table.

▷   Drag a sizing handle ⟺ to change the graph size.
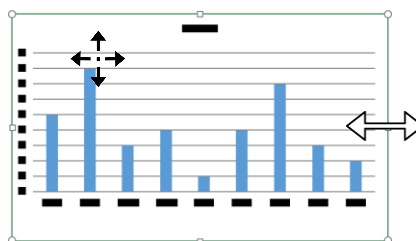
Edit the Graph Title

  ▷ Click *Chart Title* to select it.

  ▷ <u>Triple click</u> to select all the text in the chart title.

  ▷ Type Colors People Like or Color Survey.

Apply a Chart Style

  ▷ Click the Chart Design tab.

  ▷ Click the Chart Styles *More* arrow. ⌄
   Pick a style you like.

Fill a Bar with Color

  ▷ Double click on a bar. Right click on it.

  ▷ Click the *Fill* arrow. Pick a color from the palette that matches the item.

  ▷ Use your skills to make each bar the color of the candy

Click *More Fill Colors* to see more choices.

Fill the Plot Area

  ▷ Double click the graph background.
      Click the *Fill* arrow. Pick a color from the palette.

  ▷ Click the *Fill* arrow again.
      Pick *Gradient*. Pick a style.
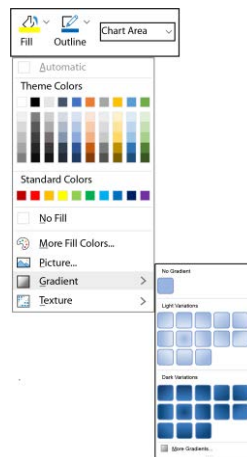
What Do Your Survey Results Mean?

Create an area to add a summary of what your results mean.

▷   Below the *Survey Results* table select a group of cells.

▷   Click *Merge & Center.* ⬄

▷   Explain the survey results:

o   What colors do people like the most?

o   What colors do people like the least?

Merge to make one big cell. You will use it to describe survey results.

Adjust Text Wrap and Format the Text

▷   Select the merged cell. Click *Wrap Text.* ab c↵

▷   Set the alignment to the top ☰ and to the left ☰.

▷   Apply your skills to set the font | Calibri ⌄ |, size | 11 ⌄ |, fill 🖌, and border ⊞.

Print the Worksheet

▷   Type your Name into a cell.

▷   From the File tab, click *Print.*
    Select print options:

o   Click *Portrait Orientation.* Pick *Landscape Orientation.*

o   Click *No Scaling.* Pick *Fit Sheet on One Page.*

Adjust print settings to place all the information on one sheet of paper.

▷   Click *Print.* 🖶

Save and Exit Excel

This is a preview of the teacher guide.
Pages have been omitted.

Session 6
Write a Report

In this session, students develop a plan to make the candy number one again. They explain their idea in a report. The document summarizes the research findings and outlines a solution to the problem. If time permits an optional extension activity has students create a new package design for candy. It should attract customers' attention causing them to grab it off the store shelf.

Assignment 12: Report Solution to the Problem

Assignment 13: Submit the Report

Session 6 Review: Spreadsheet Quiz

Session 6 Extension Activity: Draw Packaging in PowerPoint

Assignment 12 Report Solution to the Problem

You **have been working to solve the candy company's problem.** Their number one candy has been losing sales. People like the taste, but they say the candy is not fun to eat because the colors are boring.

You have been researching candy colors. You have found out what colors people like the most and least. You also know what colors are in the candy package. It is time to use this information to form a plan so that the candy will be number one again.

You will explain your solution in a report.

Make a Plan to Make the Candy Number One

1. What changes to the color of candy do you need to make?

2. What colors should have more candies in the package?

3. What colors should have less candies in the package?

4. When coming up with your plan you cannot add candies to the package. The total number of candies must stay the same.

Open the Report Template in Word and Create a Copy

▷ Ask your teacher how to open the *Report* template. It is in the *Candy* folder.

▷ Click *Save* 🖫 on the Quick Access Toolbar.

▷ Go to the place where you store your files.
In the File name box, type Candy Name Report.

▷ Click *Save*.

Add a Report Title

▷ Triple click on Report Name.

▷ Type a Report Name such as Candy Report, Action Plan, or Sales Solution.

Add Student Name

▷ Click in front of Student Name.
Drag the mouse pointer to select the words.

▷ Type Student Name.

Describe the Problem

▷ Describe the problem using information from Assignment 4.

- o Replace Company Name.
- o Replace Candy Name.

> **Yum Yum Candies Report**
>
> By **Sally Solver**
>
> **Problem**
>
> **Yum Yum Candies** is losing sales. The number one candy **Jelly Bursts** are no longer number one. People say they like the taste, but they are boring to eat because the colors are not fun.

Edit the text so the sentences make sense.

Explain Color Survey Results

▷ Look at the printout from Assignment 8. Replace words in red to explain survey results.

- o What color do people like the most?
- o What color do people like the least?

Replace the red words with survey results.

> **Color Survey Results**
>
> I did a survey to find out the colors of candy people like to eat. I found that people like **red** candy the most. I found that people like **green** candy the least.

Explain Research Results

▷ Look at the printout from Assignment 11. Replace words in red to explain research results.

- o What color of candy is in the package the most?
- o What color of candy is in the package the least?
- o What is interesting about your research results?

What surprised you about the results?

> **Candy Package Research Results**
>
> I counted the number of candy in each package. I found that most were **purple** candies. I found that there were only a few **orange** candies**. I was surprised** that there were grey candies in the package. **I found it interesting** that there were not more red candies.

What Is the Solution? Defend Your Plan

Adding more candies to the package would cost the company money. Make a plan that keeps the number of candies in the package the same.

▷ Explain the changes that need to be made to the candies:

- o What color(s) should have more candies in the package?
- o What color(s) should have less candies in the package?
- o Explain why this is a solution that will improve sales.

Why is your plan a good idea?

> **Solution**
>
> To increase sales, I think that the company should **increase the number of red candies in the package and decrease the number of green candies in the package. This will work because people like red the most.**

Copy Excel Graphs into the Report

The graphs that you created in Excel will help to explain your action plan. The column graph about the survey results shows the colors that children like. The comparison graph shows the candy packaging research results. Follow the instructions to copy the graphs from Excel into Word.

Copy the Survey Results Graph

▷ Open the *Candy Company Name* workbook in Excel.

▷ View *Sheet1* with the survey results.

▷ Select the graph. From the Home tab click *Copy.*

Paste the Survey Results Graph into the Candy Report

▷ Display your report. To do this you can:

   o Click the *Minimize* button ▬ at the top of the Excel Window.

   o Click the Word icon in the taskbar.

▷ Position the cursor <u>below</u> the *Color Survey Results* heading and information.

▷ On the Home tab, click the *Paste* arrow.

▷ Click *Picture.*

Paste Options:
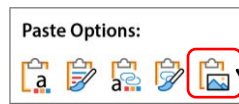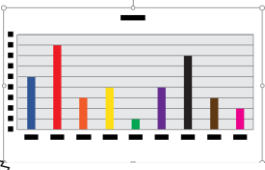
Turn the graph into a picture. This will make it easy for you to resize.

▷ Use your skills to resize the graph.

Color Survey Results

I did a survey to find out the colors of candy people like to eat. I found that people like **red** candy the most. I found that people like **green** candy the least.

You may want to center ≡ the graph.

Copy and then Paste the Comparison Graph

▷ Click the Excel icon in the taskbar to display the candy workbook.

▷ Click the *Research* sheet tab at the bottom of the worksheet.

◀ ▶ | Sheet1 | **Research**

▷ Use your skills to copy and then paste the graph into the report as a picture.

Adjust Text Wrap

▷ Select the graph.

▷ Click *Layout Options.*
Pick *Square.*

Text wrap changes how words go around a picture.
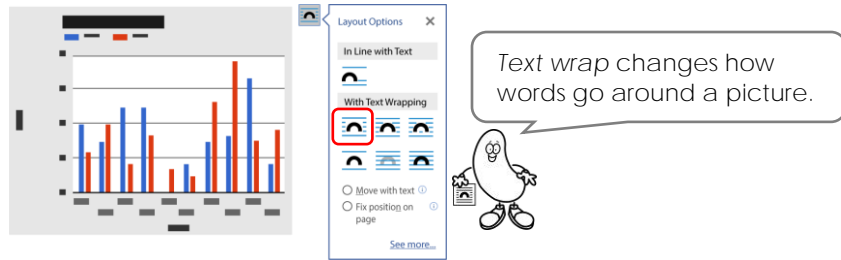
▷ Drag the graph to wrap text around it.

Make the Report Look Great

▷ Use your skills to make the report title and headings look great! The words need to stand out on the page and be easy to read. Fit the report onto one page.

　o Change the font. `Calibri ∨`

　o Set the size of the letters. `11 ∨`

　o Darken the letters. **B**

　o Slant the letters to the right. *I*

　o Place a line below the letters. U̲

　o Change the color of the letters. A

To see the whole page, click the View tab. Click *One Page.*

Save and Exit Word and Excel

This is a preview of the teacher guide.
Pages have been omitted.

TECHNOKids

Session 6 Review: Spreadsheet Quiz

Match the tool to its function.

1. **B** **B**

A. calculate data using a function

2. **A** Σ

B. add a bold style to text

3. **F** A

C. add borderlines

4. **H**

D. insert a chart or graph

5. **G**

E. wrap the text

6. **D**

F. change the color of text

7. **C**

G. merge cells and center text

8. **E** ab c

H. fill a cell or object with color

/8

9. Label the worksheet.

Row 3	E6	Column B

1. Column B

2. Row 3

3. E6

/3

10. Match the spreadsheet term to its meaning.

a.	a letter name for a column	column heading		worksheet
b.	grid made of columns and rows	worksheet		cell
c.	a number name for a row	row heading		column heading
d.	a picture of information	graph		row heading
e.	a calculation performed on data	formula		merge
f.	combine together multiple cells	merge		formula
g.	a box in a worksheet, such as C3	cell		graph

/7

11. List two ways people can use a spreadsheet.

track grades, calculate budget, schedule events, organize research data

estimate job costs, create an invoice or quote, collect survey results

/2

TOTAL   /20

Session 6 Extension Activity: Draw Packaging in PowerPoint

Create candy packaging that will attract attention using a PowerPoint template.

1. Open the *package* template in PowerPoint.

2. Save the file to your folder.

   a. Click Save ⊟ on the Quick Access Toolbar. Click *Save As.*

   b. Go to the place where you store your files.

   c. Click *Save.*

3. Add the Candy Name:

   a. From the Insert tab, click *Text Box.* A

   b. Click and drag to draw a box. Type Candy Name.

   c. Set the font [Arial ⌄], size [60 ⌄], style **B**I**S**, color **A**, and alignment. ≡

   d. Resize ⬉, move ✛, and rotate ↻ the text box.
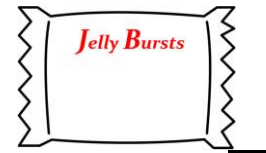
4. Format the text box using the Shape Format tab:

   Shape Styles   Shape Fill   Shape Outline   Shape Effects
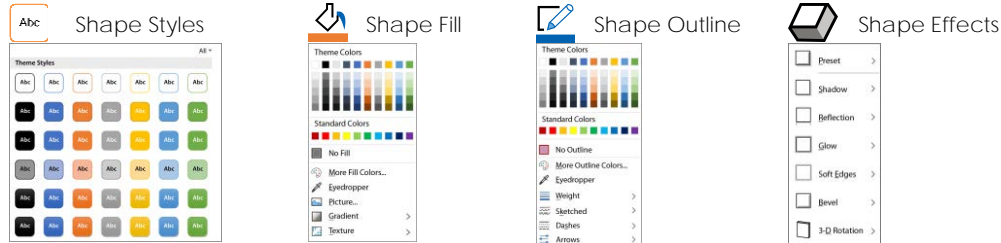
5. Draw a shape for product details:

   a. Click the Insert tab. Click *Shapes.* ⬭ Pick a shape.
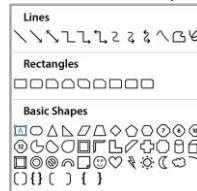
   b. Click and drag to draw a shape.

   c. Use your skills [Abc] ⬐ ✎ ⬦ to make the shape look great.

   d. Resize ⬉, move ✛, rotate ↻, or bend ⬤ the shape (*not all shapes can be bent).*

   e. Click inside the shape. Type product information such as New or Sweet.

   f. Set the font [Arial ⌄], size [60 ⌄], style **B**I**S**, color **A**, and alignment. ≡

6. Add a slogan with WordArt:

   a. From the *Insert* tab, click *WordArt*. Pick a style from the gallery.
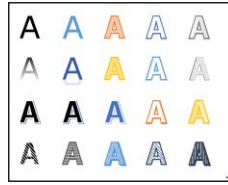
   b. Type a slogan.

   c. Click the Shape Format tab. Explore the options on the WordArt Styles group:

      A   *WordArt Styles* – Apply a style to the text.

      A   *Text Fill* – Fill the letters with a color, picture, gradient, or texture.

      A   *Text Outline* – Set the line color, width, or dash.

      A   *Text Effects* – Apply an effect such as shadow, glow, bevel, or transform.

   d. Resize , move , and rotate the WordArt.

7. Insert an image of the candy:

   a. Click the *Insert* tab. Click *Pictures*. Choose *Online Pictures*.

   b. Type candy in the search box. Press ENTER.

   c. Select a picture you like and click *Insert*.

   Drag the scroll box to view more pictures.

   d. Resize , move , and rotate the image.

   e. Click the Picture Format tab. Explore the options on the Picture Styles group:

      Picture Styles – Apply a style to the picture.

      Picture Border – Set the line color, width, or dash.

      Picture Effects – Apply an effect such as shadow, glow, bevel, or 3-D rotation.

8. Adjust object order:

   a. Move the candy picture on top of the WordArt.

   b. On the Picture Format tab, click the *Send Backward* arrow. Pick an option.

9. Apply skills to complete the candy package.

   Candy Package Tips:
   - ✓ Fill WordArt with a candy picture to create a unique design.
   - ✓ Crop a picture into a shape.
   - ✓ Click Undo to remove an action.

Appendices

Refer to the appendices for additional resources:

Appendix A: Assessment Tools

TechnoCandy Skill Summary

Report Marking Sheet

Appendix B: Contact Information

This is a preview of the teacher guide.
Pages have been omitted.

Report Marking Sheet

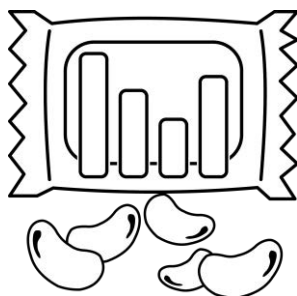|	
Candy Survey Results	
The report describes the color of candy people like the most and least. A graph shows survey results.	/3
Candy Package Research Results	
The research results describe the colors of candy in the package. Insights about the research findings are shared. A graph shows research results.	/4
Solution	
The solution is clearly explained. The plan does not change the amount of candies in the package. The plan includes more colored candies that people like and less of ones they do not. A logical reason is provided for why the plan will be a success.	/4
Report Design	
The title and headings stand out on the page. The words are easy to read. The graphs are placed neatly on the page.	/3
Spelling and Grammar	
The words are spelled correctly. Sentences use the proper punctuation.	/1
TOTAL:	/15

RESOURCE

This course includes a sample of a completed project.
Teachers can use this resource for demonstration purposes or as a source of inspiration.

Yum Yum Candies Report

By Sally Solver

Problem

Yum Yum Candies is losing sales. The number one candy Jelly Bursts is no longer number one. People say they like the taste, but it is boring to eat because the colors are not fun.

Color Survey Results

I did a survey to find out the colors of candy children like to eat. I found that children like red the most. I found that children like green the least.
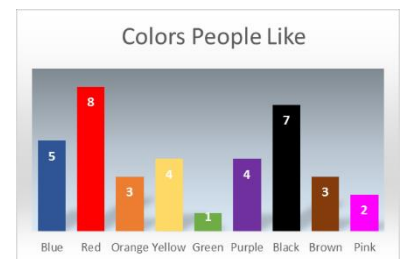
Colors People Like

Candy Package Research Results

I counted the number of candy in each package. I found that most of the candies were purple. I found that there were only a few orange candies. I was surprised that there were grey candies in the package. I found it interesting that there were not more red candies.
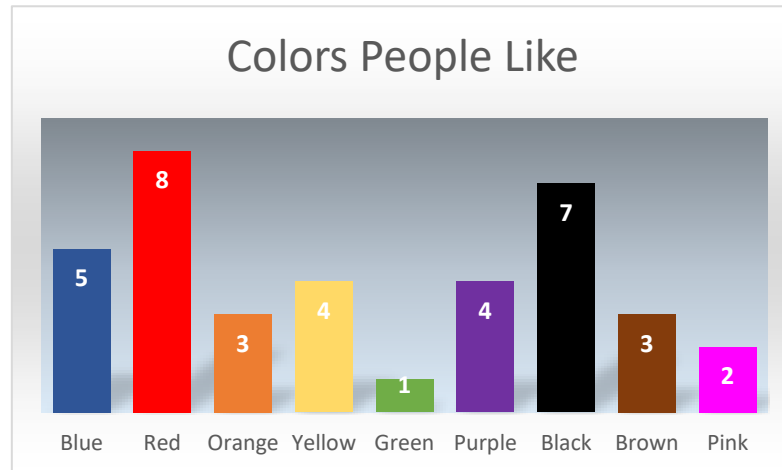

Candy Colors in Package
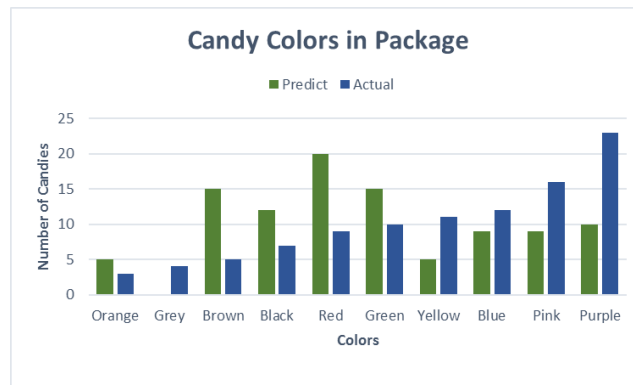
Solution

To increase sales, I think that the company should increase the number of red candies in the package and decrease the number of green candies in the package. This will work because people like red the most.

Color Survey

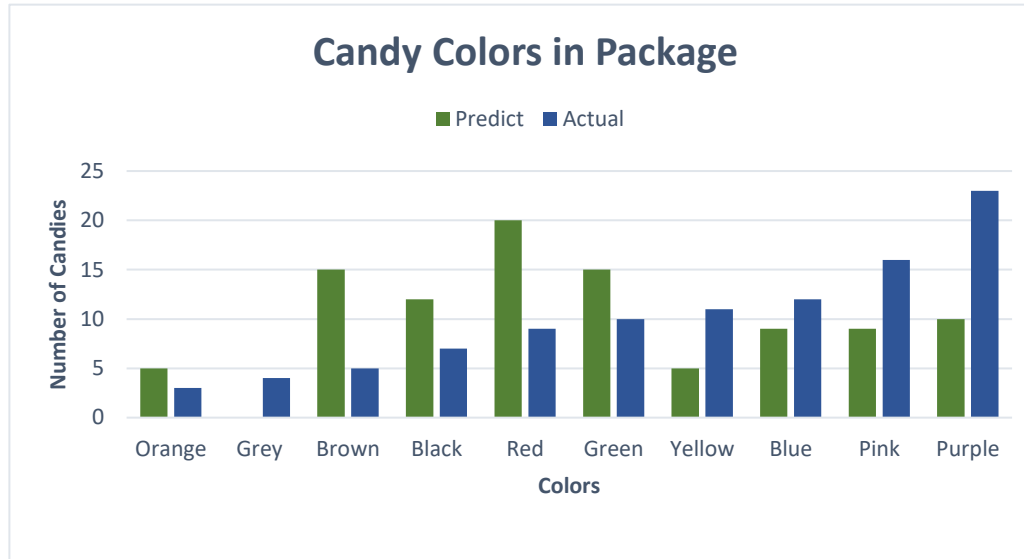| Colors	Votes
Blue	5
Red	8
Orange	3
Yellow	4
Green	1
Purple	4
Black	7
Brown	3
Pink	2
TOTAL	**37**

Colors People Like

37 people were surveyed. The most popular color was red and the least popular was green.

Candy Research

Colors	Predict	Actual
Orange	5	3
Grey	0	4
Brown	15	5
Black	12	7
Red	20	9
Green	15	10
Yellow	5	11
Blue	9	12
Pink	9	16
Purple	10	23
TOTAL	100	100

Candy Colors in Package

■ Predict   ■ Actual

Number of Candies vs Colors (Orange, Grey, Brown, Black, Red, Green, Yellow, Blue, Pink, Purple)

I predicted that there would be more red candies than any other. I discovered that there were more purple candies. I thought there would be no grey candies, but orange was the lowest number. I was surprised that there were not more red candies.