# 8<sup>th</sup> Grade

## Communicate with Friends

| | B | C |
|---|---|---|
| 1 | **What grade are you in?** | **Which of the following is your favorite way to communicate with your friends?** |
| 2 | 6th | Through social media |
| 3 | 6th | Video Chatting |
| 4 | 6th | Video Chatting |
| 5 | 6th | Through social media |
| 6 | 6th | In person |
| 7 | 6th | In person |
| 8 | 6th | In person |
| 9 | 6th | Video Chatting |
| 10 | 6th | In person |
| 11 | 6th | Texting |
| 12 | 6th | Texting |
| 13 | 6th | In person |
| 14 | 6th | Texting |
| 15 | 6th | In person |
| 16 | 6th | Through social media |
| 17 | 6th | In person |
| 18 | 6th | Through social media |

## Communicating with Friends

### Breakdown by Gender

| Gender | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|---|---|---|---|---|---|
| Male | 171 | 18 | | 50 | |
| Female | 116 | | 44 | | 70 |

### Breakdown by Grade

| Grade | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|---|---|---|---|---|---|
| 6th | 72 | 10 | | | |
| 7th | 95 | | 29 | | 44 |
| 8th | 120 | | | 41 | |

### Whole School Data Results

| | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|---|---|---|---|---|---|
| PHJH Students | 287 | | | 96 | |

# Accessing Document

Formatting Data Tables

# Cells E1-J6

1. Select E1-J1
2. Click on MERGE & CENTER.
3. Select MERGE & CENTER
4. Click on the MIDDLE ALIGN button.
   - ❏ Centers text vertically & horizontally.
5. Type the title in the box.
   - ❏ CALIBRI/SIZE 20/ BOLD.

Slide 5

**Cells E1-J6**

1. Select cells E2-J2.
2. Click on the SHADING button and select BLACK.
3. Select cells E3-J3.
4. Click on Merge & Center and select MERGE ACROSS.
5. Type BREAKDOWN BY GENDER in the box.
   ❑ CALIBRI/SIZE 14/BOLD

Slide 6

1. Enter the column titles for cells E4-J4.
   - ❏ CALIBRI/SIZE 11/BOLD
2. Select cells E4-J4.
3. Click on the WRAP TEXT button.
4. Click on the MIDDLE ALIGN button.
5. Resize the columns if necessary to make the titles look like the screenshot.

# Cells E1-J6



1. Enter the row titles for cells E5 & E6.
   - ❑ CALIBRI/SIZE 11
2. Select cells E1-J6.
3. Click on the BORDERS button.
4. Select ALL BORDERS.

Slide 8

**Recreate this table (Cells E7-J12).**

❑ Use slides 5 – 8 for reference if needed.

**Breakdown by Grade**

| Grade | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|---|---|---|---|---|---|
| 6th | | | | | |
| 7th | | | | | |
| 8th | | | | | |

**Whole School Data Results**

| | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|---|---|---|---|---|---|
| PHJH Students | | | | | |

Column C data (rows 7–18): In person, In person, Video Chatting, In person, Texting, Texting, In person, Texting, In person, Through social, In person, Through social media

**Hint: Use the WRAP TEXT button for cell E16.**

# Recreate this table (Cells E13-J16).

❑ Use slides 5 – 8 for reference if needed.

# Filtering Raw Data

# Cell F5

| F5 | ▼ | : | × | ✓ | $f_x$ | =COUNTIFS(A2:A629, "MALE", C2:C629, "IN PERSON") |

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | What is your gender? | What grade are you in? | Which of the following is your favorite way to communicate with your friends? | | **Communicating with Friends** | | | | | |
| 2 | Female | 6th | Through social media | | | | | | | |
| 3 | Female | 6th | Video Chatting | | **Breakdown by Gender** | | | | | |
| 4 | Female | 6th | Video Chatting | | Gender | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
| 5 | Female | 6th | Through social media | | Male | 171 | | | | |
| 6 | Female | 6th | In person | | Female | | | | | |
| 7 | Female | 6th | In person | | | | | | | |

1. In cell F5 type the COUNTIFS formula
   - ❑ **=COUNTIFS($A$2:$A$629, "MALE", $C$2:$C$629, "IN PERSON")**
2. Hit ENTER
   - ❑ Number in cell F5 should be 171

**171 males responded "in person" to this statement.**

**COUNTIFS Formula:**
Counts the number of entries in the selected ranges that have that combination of responses.

Use the **$** sign in formulas so that the cell range(s) won't change with the formula is copied to other cells.

Slide 12

1. Hold the cursor over the bottom right corner of cell F5 until see a **+** sign.
2. Click & drag to cell J5 to copy formula to cells G5-J5.
3. Repeat step 1 for cell J5.
4. Click & drag down to cell J6 to copy the formula to cells F6-J6.
   ❑ The number in all cells should be 171.

Slide 13

Spreadsheet formula bar: `=COUNTIFS($A$2:$A$629, "FEMALE", $C$2:$C$629, "VIDEO CHATTING")`

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | Female | 6th | Video Chatting | | Gender | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting | |
| 5 | Female | 6th | Through social media | | Male | 171 | 18 | | 50 | | |
| 6 | Female | 6th | In person | | Female | 116 | | 44 | | 70 | |
| 7 | Female | 6th | In person | | | | | | | | |
| 8 | Female | 6th | In person | | Breakdown by Grade | | | | | | |
| | | | | | Grade | In Person | Talking on the Phone | Texting | Through Social | Video | |

Edit equations for cells G5-J5 and F6-J6.  The changes should reflect the different row and column titles for each cell.
❑ Use the chart on slide 15 to check your edited formulas.

Slide 14

# Cells F5-J6

| | |
|---|---|
| **F5** | =COUNTIFS($A$2:$A$629, "MALE", $C$2:$C$629, "IN PERSON") |
| **F6** | =COUNTIFS($A$2:$A$629, "FEMALE", $C$2:$C$629, "IN PERSON") |
| **G5** | =COUNTIFS($A$2:$A$629, "MALE", $C$2:$C$629, "TALKING ON THE PHONE") |
| **G6** | =COUNTIFS($A$2:$A$629, "FEMALE", $C$2:$C$629, "TALKING ON THE PHONE") |
| **H5** | =COUNTIFS($A$2:$A$629, "MALE", $C$2:$C$629, "TEXTING") |
| **H6** | =COUNTIFS($A$2:$A$629, "FEMALE", $C$2:$C$629, "TEXTING") |
| **I5** | =COUNTIFS($A$2:$A$629, "MALE", $C$2:$C$629, "THROUGH SOCIAL MEDIA") |
| **I6** | =COUNTIFS($A$2:$A$629, "FEMALE", $C$2:$C$629, "THROUGH SOCIAL MEDIA") |
| **J5** | =COUNTIFS($A$2:$A$629, "MALE", $C$2:$C$629, "VIDEO CHATTING") |
| **J6** | =COUNTIFS($A$2:$A$629, "FEMALE", $C$2:$C$629, "VIDEO CHATTING") |

| F10 | ▼ | : | × | ✓ | fx | =COUNTIFS($B$2:$B$629, "6TH", $C$2:$C$629, "IN PERSON") | | | | |

| | A | B | C | D | E | F | G | H | I | J | K |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | Female | 6th | In person | | Female | 116 | | 44 | | 70 | |
| 7 | Female | 6th | In person | | | | | | | | |
| 8 | Female | 6th | In person | | **Breakdown** ...de | | | | | | |
| 9 | Female | 6th | Video Chatting | | **Grade** | **In Person** | **Talking on the Phone** | **Texting** | **Through Social Media** | **Video Chatting** | |
| 10 | Female | 6th | In person | | 6th | 72 | | | | | |
| 11 | Female | 6th | Texting | | 7th | | | | | | |
| 12 | Female | 6th | Texting | | 8th | | | | | | |
| 13 | Female | 6th | In person | | | | | | | | |
| 14 | Female | 6th | Texting | | **Whole School Data Results** | | | | | | |

1. In cell F10 type the COUNTIFS formula
   - ❑ **=COUNTIFS($B$2:$B$629, "6TH", $C$2:$C$629, "IN PERSON")**
2. Hit ENTER
   - ❑ Number in cell F5 should be 72

**72 6TH graders responded "in person" to this statement.**

**COUNTIFS Formula:**
Counts the number of entries in the selected ranges that have that combination of responses.

Use the **$** sign in formulas so that the cell range(s) won't change with the formula is copied to other cells.

1. Hold the cursor over the bottom right corner of cell F10 until see a **+** sign.
2. Click & drag to cell J10 to copy formula to cells G10-J10.
3. Repeat step 1 for cell J10.
4. Click & drag down to cell J12 to copy the formula to cells F11-J12.
   ❑ The number in all cells should be 72.

Formula bar: J12 | =COUNTIFS($B$2:$B$629, "8TH", $C$2:$C$629, "VIDEO CHATTING")

| | A | B | C |
|---|---|---|---|
| 6 | Female | 6th | In person |
| 7 | Female | 6th | In person |
| 8 | Female | 6th | In person |
| 9 | Female | 6th | Video Chatting |
| 10 | Female | 6th | In person |
| 11 | Female | 6th | Texting |
| 12 | Female | 6th | Texting |
| 13 | Female | 6th | In person |
| 14 | Female | 6th | Texting |

| | E | F | G | H | I | J |
|---|---|---|---|---|---|---|
| 6 | Female | 116 | | 44 | | 70 |

**Breakdown by Grade**

| Grade | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|---|---|---|---|---|---|
| 6th | 72 | 10 | | | |
| 7th | 95 | | 29 | | 44 |
| 8th | 120 | | | 41 | |

Whole School Data Results

Edit equations for cells G10 – J10, F11 – J11, & F12 – J12.  The changes should reflect the different row and column titles for each cell.
❑ Use the chart on slide 19 to check your edited formulas.

Slide 18

# Cells F10-J12

| | |
|---|---|
| **F10** | =COUNTIFS($B$2:$B$629, "6TH", $C$2:$C$629, "IN PERSON") |
| **F11** | =COUNTIFS($B$2:$B$629, "7TH", $C$2:$C$629, "IN PERSON") |
| **F12** | =COUNTIFS($B$2:$B$629, "8TH", $C$2:$C$629, "IN PERSON") |
| **G10** | =COUNTIFS($B$2:$B$629, "6TH", $C$2:$C$629, "TALKING ON THE PHONE") |
| **G11** | =COUNTIFS($B$2:$B$629, "7TH", $C$2:$C$629, "TALKING ON THE PHONE") |
| **G12** | =COUNTIFS($B$2:$B$629, "8TH", $C$2:$C$629, "TALKING ON THE PHONE") |
| **H10** | =COUNTIFS($B$2:$B$629, "6TH", $C$2:$C$629, "TEXTING") |
| **H11** | =COUNTIFS($B$2:$B$629, "7TH", $C$2:$C$629, "TEXTING") |
| **H12** | =COUNTIFS($B$2:$B$629, "8TH", $C$2:$C$629, "TEXTING") |
| **I10** | =COUNTIFS($B$2:$B$629, "6TH", $C$2:$C$629, "THROUGH SOCIAL MEDIA") |
| **I11** | =COUNTIFS($B$2:$B$629, "7TH", $C$2:$C$629, "THROUGH SOCIAL MEDIA") |
| **I12** | =COUNTIFS($B$2:$B$629, "8TH", $C$2:$C$629, "THROUGH SOCIAL MEDIA") |
| **J10** | =COUNTIFS($B$2:$B$629, "6TH", $C$2:$C$629, "VIDEO CHATTING") |
| **J11** | =COUNTIFS($B$2:$B$629, "7TH", $C$2:$C$629, "VIDEO CHATTING") |
| **J12** | =COUNTIFS($B$2:$B$629, "8TH", $C$2:$C$629, "VIDEO CHATTING") |

# Total Sum Table

The spreadsheet shows a formula bar with `=SUM(F10:F12)` and a tooltip `SUM(number1, [number2], ...)`.

**Breakdown by Grade**

| Grade | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|-------|-----------|---------------------|---------|---------------------|----------------|
| 6th | 72 | 10 | | | |
| 7th | 95 | | 29 | | 44 |
| 8th | 120 | | | 41 | |

**Whole School Data Results**

| | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
|--|-----------|---------------------|---------|---------------------|----------------|
| PHJH Students | =SUM(F10 | | | | |

Left column data:

| | A | B | |
|--|---|---|--|
| 7 | Female | 6th | In person |
| 8 | Female | 6th | In person |
| 9 | Female | 6th | Video Chatting |
| 10 | Female | 6th | In person |
| 11 | Female | 6th | Texting |
| 12 | Female | 6th | Texting |
| 13 | Female | 6th | In person |
| 14 | Female | 6th | Texting |
| 15 | Female | 6th | In person |
| 16 | Female | 6th | Through social media |
| 17 | Female | 6th | In person |
| 18 | Female | 6th | Through social media |

1. In cell J16 type the SUM EQUATION
   ❑ =SUM(select cells F10 – F12)
2. Hit ENTER
   ❑ Number in cell J16 should be 287.

Total # students that responded "In Person."

F10-F12 = F10+F11+F12

| F16 | ▼ | : | × ✓ fx | =SUM(F10:F12) |

| ▲ | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | Female | 6th | In person | | | | | | | | | |
| 8 | Female | 6th | In person | | **Breakdown by Grade** | | | | | | | |
| 9 | Female | 6th | Video Chatting | | Grade | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting | | |
| 10 | Female | 6th | In person | | 6th | 72 | 10 | | | | | |
| 11 | Female | 6th | Texting | | 7th | 95 | | 29 | | 44 | | |
| 12 | Female | 6th | Texting | | 8th | 120 | | | 41 | | | |
| 13 | Female | 6th | In person | | | | | | | | | |
| 14 | Female | 6th | Texting | | **Whole School Data Results** | | | | | | | |
| 15 | Female | 6th | In person | | | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting | | |
| 16 | Female | 6th | Through social media | | PHJH Students | 287 | | | | 96 | | |
| 17 | Female | 6th | In person | | | | | | | | | |
| 18 | Female | 6th | Through social media | | | | | | | | | |

1. Hold the cursor over the bottom right corner of cell F16 until see a **+** sign.
2. Click & drag to cell J16 to copy formula to cells G16-J16.
3. Use the table below to double check the formulas for cells G16-J16.

| **G16** | =SUM(G10:G12) | **H16** | =SUM(H10:H12) |
|---|---|---|---|
| **I16** | =SUM(I10:I12) | **J16** | =SUM(J10:J12) |

# Saving Spreadsheet

# SAVE TO ONE DRIVE

8th Excel 3 Working Copy (1) - Excel

| File | Home | Insert | Page Layout | Formulas | Data | Review | View | ♀ Tell me what you want to do... |

Paste — Cut, Copy, Format Painter
Clipboard

Calibri | 11 | A⁺ A⁻
B I U ▾ | ▦ ▾ | ♦ ▾ A ▾
Font

Wrap Text
Merge & Center ▾
Alignment

General
$ ▾ % , | ←.0 .00→
Number

Conditional Formatting ▾ | Format as Table ▾
Normal | Bad
Neutral | Calculation
Styles

F16 | fx | =SUM(F10:F12)

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | Female | 6th | In person | | | | | | | |
| 8 | Female | 6th | In person | | **Breakdown by Grade** | | | | | |
| 9 | Female | 6th | Video Chatting | | Grade | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
| 10 | Female | 6th | In person | | 6th | 72 | 10 | | | |
| 11 | Female | 6th | Texting | | 7th | 95 | | 29 | | 44 |
| 12 | Female | 6th | Texting | | 8th | 120 | | | 41 | |
| 13 | Female | 6th | In person | | | | | | | |
| 14 | Female | 6th | Texting | | **Whole School Data Results** | | | | | |
| 15 | Female | 6th | In person | | | In Person | Talking on the Phone | Texting | Through Social Media | Video Chatting |
| 16 | Female | 6th | Through social media | | PHJH Students | 287 | | | | 96 |
| 17 | Female | | n | | | | | | | |
| 18 | Female | | social media | | | | | | | |

**Click on DISK ICON to save your spreadsheet to OneDrive**

# Turning In Assignment

# TURN IN ASSIGNMENT

Conversations   Files   Class Notebook   **Assignments**

< Back

**Turn in**

## Communicate with Friends

📅 Due Date
Thu May 30, 2019 at 11:59 PM

✓ Points
50 points possible

Instructions
Use the direction booklet to help you.

Reference materials
*None*

My work

X📊 communicatewithfriends.xls   ...

+ Add work

1. Verify that your document is under MY WORK.
2. Click on TURN IN.