

## UNIT 30: GOOGLE SHEETS INTERFACE LESSON 6: FORMULA BAR

### LESSON OVERVIEW

The Formula Bar is located at the top of your sheet under the Toolbar.

Time: ~30 minutes

### OBJECTIVE

Student is able to navigate the interface of Google Sheets.

### PRINT PREPARATION

1. Print this lesson's Dollar Tracker.
2. Review sequence of activities in lesson.
3. Learn which supplements you will use.
4. Print/Copy/Laminate materials that fit your student's needs.
5. Refer to your Level 2 Guide to read about effective practices.

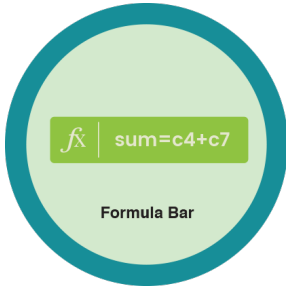
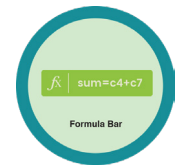
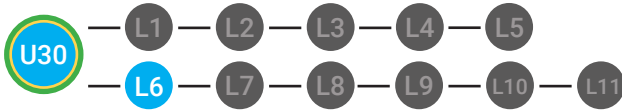
### ONLINE REVIEW

1. Sign into Digitability
2. Click **LESSONS** tab
3. Select **Level 3 - Tech-savvy Ambassador**
4. Select **Unit 30**
5. Select **Lesson 6 - Formula Bar**

### WORKPLACE BEHAVIOR FOCUS FOR THIS UNIT



Using the Dollar Tracker, select two additional behaviors that you will target throughout the course of this unit. Always include participation/contribution in addition to the two new behaviors.



## LESSON PLAN

### WARM UP



1. Write the following on the board, leaving a blank space for the words “cell,” “column,” and “row.”

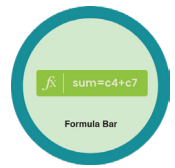
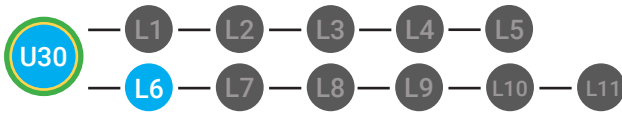
a. The name of a \_\_\_\_\_ depends on what \_\_\_\_\_ and \_\_\_\_\_ intersect

2. Have a student come up to the board to fill in the correct answer.

Repeat the process to ensure all students get a chance to participate and earn a participation dollar.



3. Distribute **30.IMAGE.IEC** to students. See **DIFFERENTIATION** for this activity to identify supplements needed for your students.



## DIFFERENTIATION

- T1** Writes response on board
- T2** Writes response on board with assistance from a Tier 1 partner or writes answer in notebook
- T3** Writes response on board with assistance from an adult or points to **Image Exchange Cards** [30.IMAGE.IEC]



**Pro tip:** Remember Rule #3 Avoid a power struggle to stay focused on instruction. We are helping students learn to self-regulate. Therefore, it is important to give students time to opt in or identify their replacement behavior. If a student is not following directions, give them one minute before taking additional dollars.



4. Give immediate feedback to each student (see below). Record Workplace Behavior earnings and/or spending on the **Dollar Earnings Tracker**. [30.6.DollarTracker]

[NAME] + [BEHAVIOR] + [CONSEQUENCE] + [REPLACEMENT BEHAVIOR/REINFORCEMENT]

### +\$ SUCCESSFUL

*"Nice job [Behavior], Marcus. You earned a [Behavior] dollar."*

### -\$ PROBLEMATIC

*"Marcus, you [Behavior]. [Behavior] cost \$1. Next time, [Replacement Behavior] to earn a \$1."*

- Participation/Contribution
- Sharing/Helping
- Greeting a Guest
- Following Directions/Staying on Task
- Encouraging

- Off-task
- Off-topic/Inappropriate Comment
- Disrespect/Teasing
- Complaining/Whining
- Interrupting
- UMAPA
- Arguing

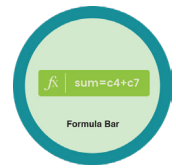
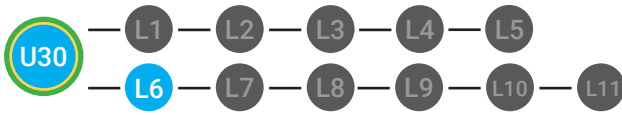
## GUIDED WATCHING



Call out earnings to the class, *"[Student] has earned x dollars for participating. [Student] has earned x dollars for participating and sharing. [Student] has earned x dollars..."*



**Pro tip:** Build confidence in your students Identify students who have not earned money and focus on engaging them. Use differentiation tools if reluctant to participate i.e. have them point to or write down their answers. EVERY student should be earning money.



1. Ask, *“For a participation dollar, who can tell me the name of our next badge?”*

**Answer:** Formula Bar

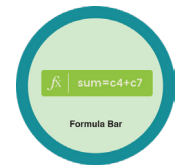
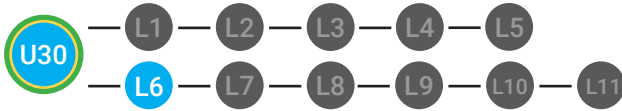


2. Distribute **30.BADGE** to students. See **DIFFERENTIATION** for this activity to identify supplements needed for your students.



## DIFFERENTIATION

- T1** On-topic shared verbal response
- T2** Writes down badge name or walks up to point to badge
- T3** Uses **Badge Board** [30.BADGE] for this unit



3. Give immediate feedback to each student (see below). Record Workplace Behavior earnings and/or spending on the **Dollar Earnings Tracker**. [30.6.DollarTracker]

[NAME] + [BEHAVIOR] + [CONSEQUENCE] + [REPLACEMENT BEHAVIOR/REINFORCEMENT]

+\$ SUCCESSFUL	-\$ PROBLEMATIC
<p><i>"Nice job [Behavior], Marcus. You earned a [Behavior] dollar."</i></p>	<p><i>"Marcus, you [Behavior]. [Behavior]s cost \$1. Next time, [Replacement Behavior] to earn a \$1."</i></p>

- Participation/Contribution
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- Interrupting
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**Pro tip:** Remember Rule #3 Avoid a power struggle to stay focused on instruction. We are helping students learn to self-regulate. Therefore, it is important to give students time to opt in or identify their replacement behavior. If a student is not following directions, give them one minute before taking additional dollars.

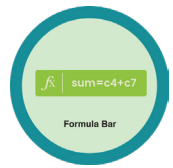
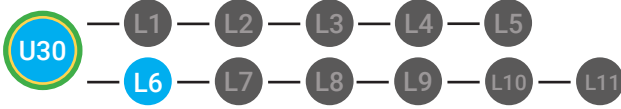



4. Bring attention to screen, *"Let's watch this lesson. I know that [student's name] is actively watching because he has his eyes on the screen, and he is actively listening by giving a thumbs up when he hears the phrase "Formula Bar."*

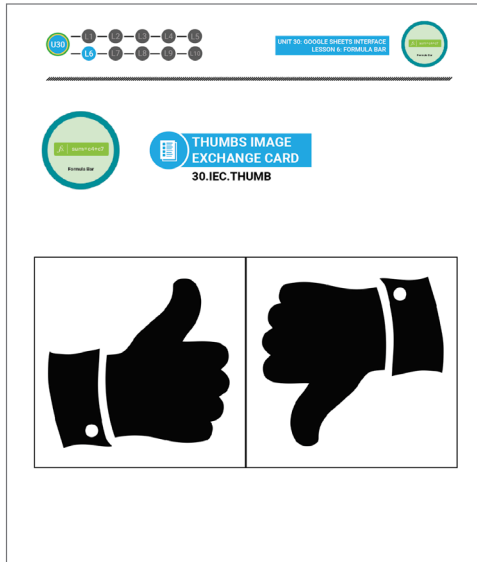
5. Ask students to give a thumbs up every time they hear and/or see the phrase **"Formula Bar"** in the video.



6. Play video.

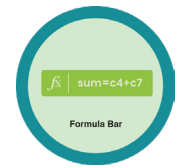
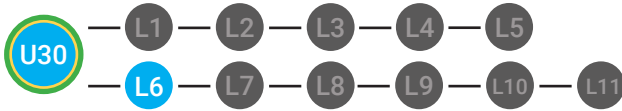


7. Distribute **30.IEC.THUMB** to students. See  **DIFFERENTIATION** for this activity to identify supplements needed for your students.



## DIFFERENTIATION

- T1** Puts thumbs up
- T2** Uses **Thumbs Image Exchange Card** [30.IEC.THUMB]
- T3** Uses **Thumbs Image Exchange Card** [30.IEC.THUMB]



8. Give immediate feedback to each student (see below). Record Workplace Behavior earnings and/or spending on the **Dollar Earnings Tracker**. [30.6.DollarTracker]

[NAME] + [BEHAVIOR] + [CONSEQUENCE] + [REPLACEMENT BEHAVIOR/REINFORCEMENT]

+ \$ SUCCESSFUL	- \$ PROBLEMATIC
<p><i>"Nice job [Behavior], Marcus. You earned a [Behavior] dollar."</i></p>	<p><i>"Marcus, you [Behavior]. [Behavior]s cost \$1. Next time, [Replacement Behavior] to earn a \$1."</i></p>

- Participation/Contribution
- Sharing/Helping
- Greeting a Guest
- Following Directions/Staying on Task
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- UMAPA
- Arguing

## INFORMAL ASSESSMENT



1. Ask, *"For a participation dollar, who can tell me what the Formula Bar shows you?"*

**Possible Answers:** what formula you have in a cell.

Write the term and definition on the board after student responses.



2. Ask, *"For a participation dollar, what will happen if you do not have a formula in a cell?"*

**Possible Answers:** there will be NO formula in the Formula Bar



3. Ask, *"For a participation dollar, where is the Formula Bar located in Google Sheets?"*

**Possible Answers:** at the top of your sheet under the Toolbar



**Pro tip:** Use content domain to develop expressive communication. If a student gives a one-word answer or a fragment, require a complete sentence before awarding the \$1. Then, use positive narration to reinforce the student's expressive communication:

"I love how you used a complete sentence for your answer. Nice job earning a dollar!"

"Yes, nice job participating, [student]! You earned a participation dollar."

4. Distribute **30.IMAGE.IEC** or **Yes or No Image Exchange Cards** **30.IEC.Y/N** to students. See **DIFFERENTIATION** for this activity to identify supplements needed for your students.

**IMAGE EXCHANGE CARDS**  
 30.IEC.IMAGE

Cell: A screenshot of a Google Sheet cell with a red arrow pointing to it.

Rows: A screenshot of a Google Sheet showing a row highlighted in green.

Columns: A screenshot of a Google Sheet showing a column highlighted in green.

Formula: A screenshot of the formula bar containing the formula  $f3 + g4 = 20$ .

**YES OR NO IMAGE EXCHANGE CARD**  
 30.IEC.Y/N

Yes: A large black checkmark.

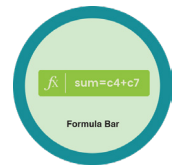
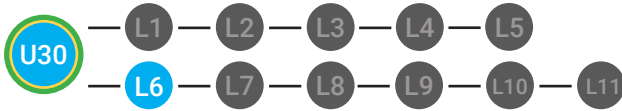
No: A large black X.



## DIFFERENTIATION

- T1** On-topic shared verbal response
- T2** Writes response down in notebook OR rephrase prompt to a **yes or no** question
- T3** Distribute **Yes or No Image Exchange Card** [30.IEC.Y/N] for rephrased question





5. Give immediate feedback to each student (see below). Record Workplace Behavior earnings and/or spending on the **Dollar Earnings Tracker**. [30.6.DollarTracker]



**Pro tip: Stick to the script!**  
Help your students develop self-regulation strategies. Do not give lengthy explanations for behavior. Using clear language formulas helps students identify the workplace behavioral norm AND the optimal replacement behavior.

[NAME] + [BEHAVIOR] + [CONSEQUENCE] + [REPLACEMENT BEHAVIOR/REINFORCEMENT]

+ \$ SUCCESSFUL	- \$ PROBLEMATIC
<p><i>"Nice job [Behavior], Marcus. You earned a [Behavior] dollar."</i></p>	<p><i>"Marcus, you [Behavior]. [Behavior]s cost \$1. Next time, [Replacement Behavior] to earn a \$1."</i></p>

- Participation/Contribution
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- Off-task
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- Disrespect/Teasing
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- Interrupting
- UMAPA
- Arguing

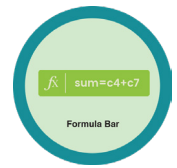
## PLAY ACTIVITY VIDEO




1. Ask the class, *"Who would like to unlock the Formula Bar Badge for \$1?"*

Click Activity Button to Play Activity Video

2. Student discusses with class to choose the correct answer.
  - a. If student chooses correct answer, have student or whole class dance.
  - b. If student chooses incorrect answer, repeat Step 2 until



3. Distribute and cut out **Word Wall Printout 30.6.5** Students that unlocked the badge will place the Formula Bar printout on the classroom's word wall. See  **DIFFERENTIATION** for this activity to identify supplements needed for your students.

**WORD WALL PRINTOUT**  
 30.6.5

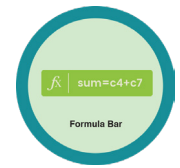
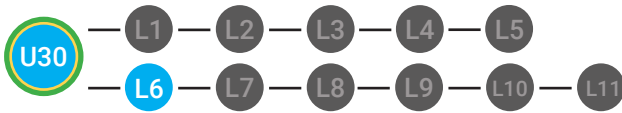
The formula bar is located at the top of your sheet under the toolbar.

**DIFFERENTIATION**  
 Choose to cut out badge and definition or only badge for your classroom wall.



## DIFFERENTIATION

- T1** Student will use verbal prompting to unlock the badge with the class.
- T2** Student will use verbal prompting and hand signals to unlock the badge with the class.
- T3** Student will use hand signals, pointing, prompting levels or adult/Tier 1 partner support to unlock the badge with the class.



4. Give immediate feedback to each student (see below). Record Workplace Behavior earnings and/or spending on the **Dollar Earnings Tracker**. [30.6.DollarTracker]

[NAME] + [BEHAVIOR] + [CONSEQUENCE] + [REPLACEMENT BEHAVIOR/REINFORCEMENT]

<p><b>+\$ SUCCESSFUL</b></p> <p><i>"Nice job [Behavior], Marcus. You earned a [Behavior] dollar."</i></p>	<p><b>-\$ PROBLEMATIC</b></p> <p><i>"Marcus, you [Behavior]. [Behavior]s cost \$1. Next time, [Replacement Behavior] to earn a \$1."</i></p>
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- Participation/Contribution
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## ASSESSMENT/EXIT TICKET

1. Distribute the **Formula Bar** Exit Ticket **30.6.6** to students. See **DIFFERENTIATION** for this activity to identify supplements needed for your students.

**T1 FORMULA**  
EXIT TICKET | 30.6.6.1

Directions: Circle the formula bar on this spreadsheet. What is the formula of the highlighted cell? Write the formula on the lines provided.

Fruit & Vegetables Inventory					
Apples	Pears	Oranges	Bananas	Total fruits	
10	7	9	10	36	
Carrots	Polatos	Kale	Tomatoes	Total Vegetabl	
7	12	20	6		

What is the formula of the highlighted cell?

\_\_\_\_\_

\_\_\_\_\_

**T2 FORMULA**  
EXIT TICKET | 30.6.6.2

Directions: Circle or point to the formula bar on this spreadsheet. What is the formula of the highlighted cell? Circle the answer on the multiple choice question.

Fruit & Vegetables Inventory					
Apples	Pears	Oranges	Bananas	Total fruits	
10	7	9	10	36	
Carrots	Polatos	Kale	Tomatoes	Total Vegetabl	
7	12	20	6		

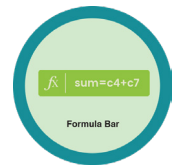
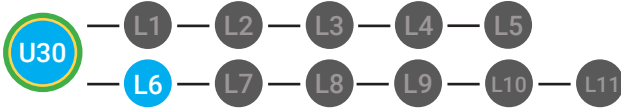
What is the formula of the highlighted cell?

a. =SUM(A4+B6+C7+D10)  
 b. =SUM(A2+B2+C2+D2)  
 c. =SUM(A3+B3+C3+D3)  
 d. =SUM(A6+B7+C8+D2)

**T3 TRACE 'N' LEARN**  
EXIT TICKET | 30.6.6.3

Formula Bar

The formula bar is located at the top of your sheet under the toolbar.



## DIFFERENTIATION

T1

Using Tier 1 **Formula** Exit Ticket [30.6.6.1], student circles the Formula Bar on this spreadsheet. Write the formula on the lines provided.

T2

Using Tier 2 **Formula** Exit Ticket [30.6.6.2], student circles or points to the Formula Bar on this spreadsheet. Circle the answer on the multiple choice question.

T3

Student has option to complete **Formula** Exit Ticket [30.6.6.2] or **Trace 'n' Learn card** Exit Ticket [30.6.6.3].



2. Give immediate feedback to each student (see below). Record Workplace Behavior earnings and/or spending on the **Dollar Earnings Tracker**. [30.6.DollarTracker]

[NAME] + [BEHAVIOR] + [CONSEQUENCE] + [REPLACEMENT BEHAVIOR/REINFORCEMENT]

### +\$ SUCCESSFUL

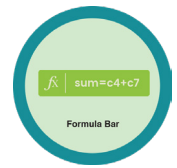
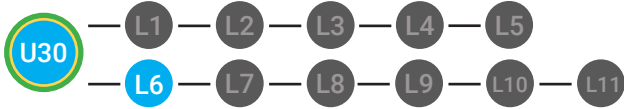
*"Nice job [Behavior], Marcus. You earned a [Behavior] dollar."*

### -\$ PROBLEMATIC

*"Marcus, you [Behavior]. [Behavior]s cost \$1. Next time, [Replacement Behavior] to earn a \$1."*

Participation/Contribution  
Sharing/Helping  
Greeting a Guest  
Following Directions/Staying on Task  
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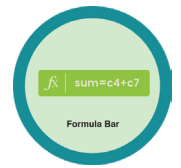
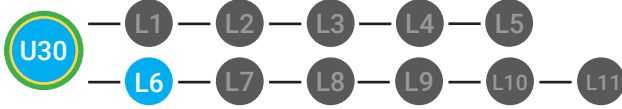
## IMMEDIATE FEEDBACK/NEXT STEPS

1. Read off Dollar Earnings Tracker and announce how many dollars each student earned or spent during the lesson.
2. Students will fill in their dollar earnings from the lesson using their **My Digitability Earnings sheet**. Have students staple this sheet into their notebooks so they can use it for the entire unit.
3. If time permits, you can either have students log into their student accounts for independent practice or you can continue on to the next lesson plan.



## DIFFERENTIATION

- T1** Login independently using password cards.
- T2** Login independently using password card with the help from a Tier 1 partner for any required troubleshooting.
- T3** Teacher or Tier 1 assistance to help student login using their password card.



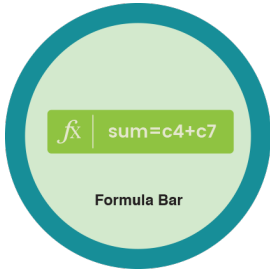
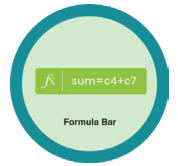
**Behaviors**

**Name**

- Successful**
- Participation/  
Contributing
- Sharing/Helping/  
Collaborating
- Greeting a Guest
- Following Directions/  
Staying on Task
- Encouraging/  
Complementing

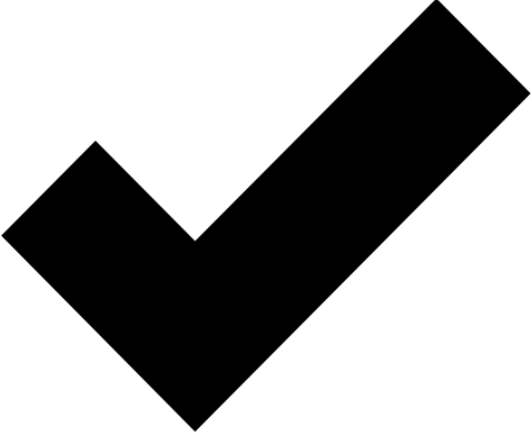
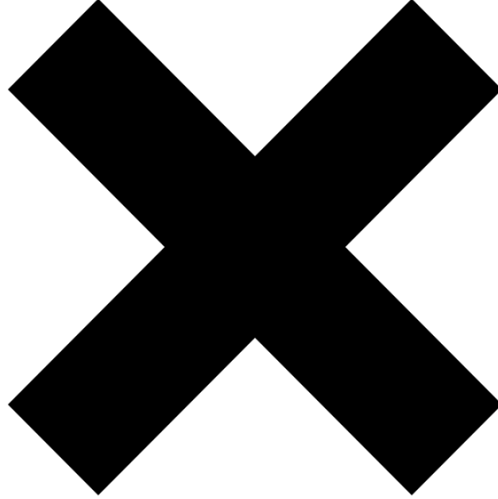
- Problematic**
- Off Task
- Off-Topic/  
Inappropriate  
Comment
- Disrespect/Teasing
- Complaining/Whining
- Arguing
- Interrupting
- UMAPA

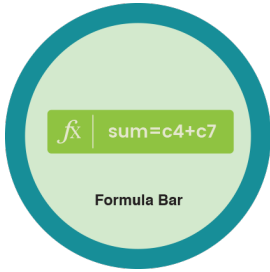
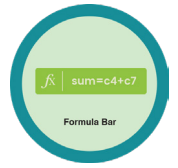
	EX: Sam					
Participation/ Contributing						
Sharing/Helping/ Collaborating						
Greeting a Guest						
Following Directions/ Staying on Task						
Encouraging/ Complementing						
Off Task						
Off-Topic/ Inappropriate Comment						
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UMAPA						



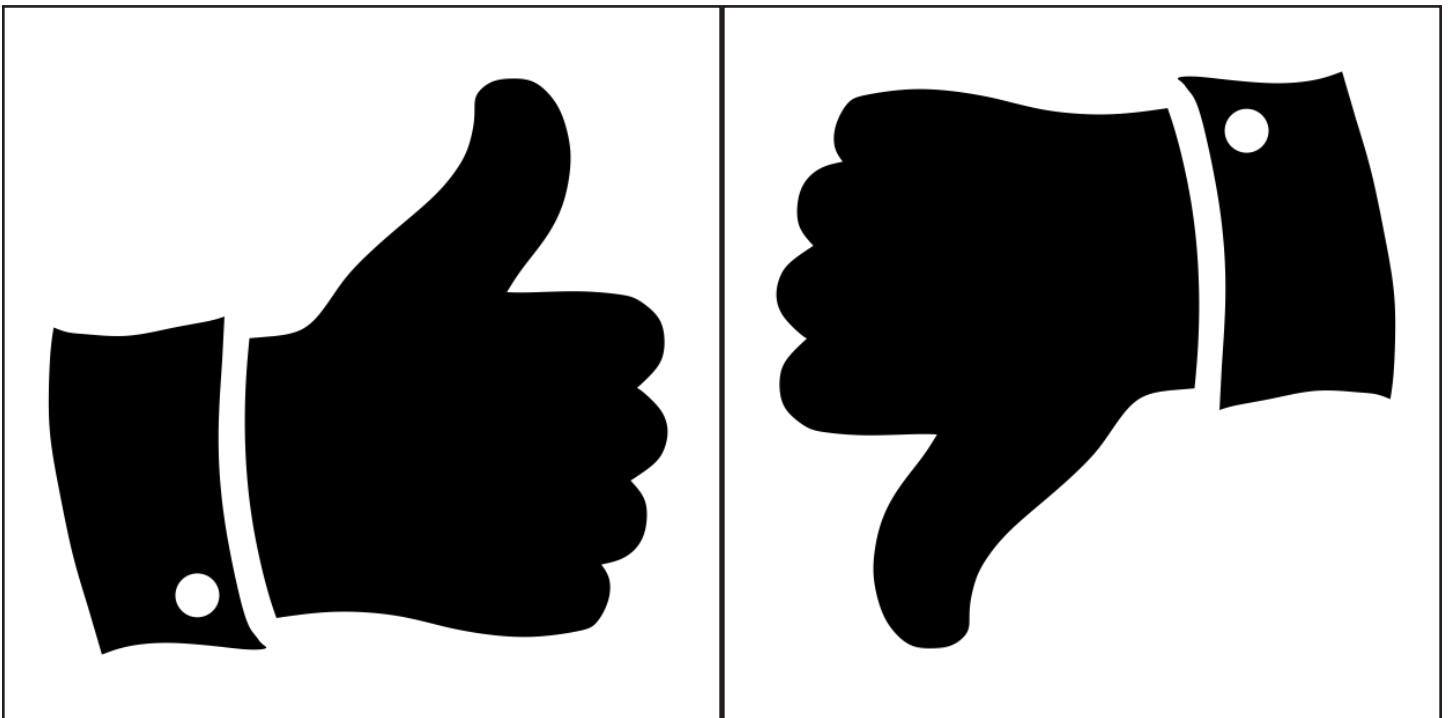
 **YES OR NO IMAGE EXCHANGE CARD**

**30.IEC.Y/N**

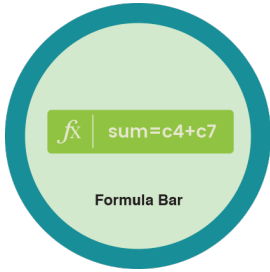
 <p><b>Yes</b></p>	 <p><b>No</b></p>
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 **THUMBS IMAGE  
EXCHANGE CARD**  
**30.IEC.THUMB**







# IMAGE EXCHANGE CARDS

## 30.IEC.IMAGE

### Cell

	A	B	C	D
1	Apples	Pears	Total fruits	
2	10	7	17	
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

### Rows

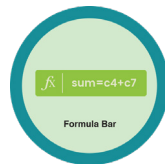
	A	B	C	D
1	Apples	Pears	Total fruits	
2	10	7	17	
3				
4				
5				
6				
7				
8				
9				

### Columns

	A	B	C	D	E	F
1	Apples	Pears	Total fruits			
2	10	7	17			
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

### Formula

$$f3 + g4 = 20$$



**Name of Your Spreadsheets**

**Google Sheets Folder Icon**

**Menu Bar**

**Google Sheets Toolbar**

**Cells**

**Formula Bar**

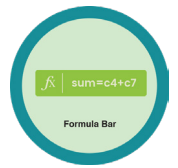
**Columns and Rows**

**Add Sheets Button**

**Collaborator Bubbles in Google Sheets**

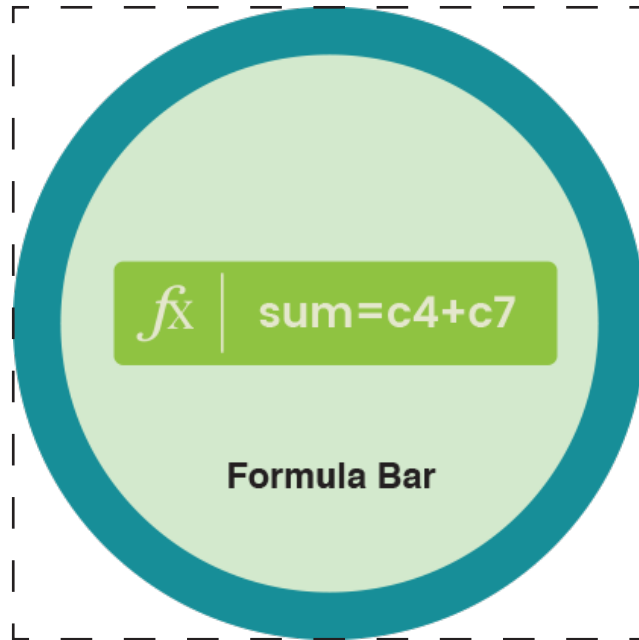
**Comments in Google Sheets**

**Google Sheets Interface Master Badge**



# WORD WALL PRINTOUT

30.6.5

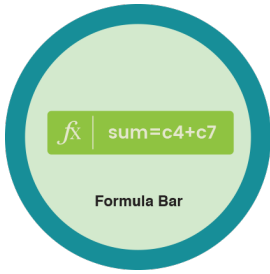
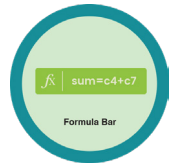
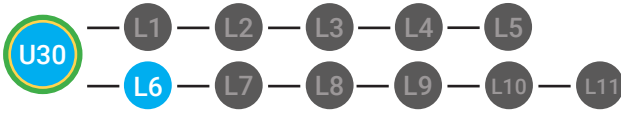


The Formula Bar is located at the top of your sheet under the Toolbar.



## DIFFERENTIATION

Choose to cut out badge and definition or only badge for your classroom wall.



# T1 FORMULA

## EXIT TICKET | 30.6.6.1

**Directions:** Circle the Formula Bar on this spreadsheet. What is the formula of the highlighted cell? Write the formula on the lines provided.

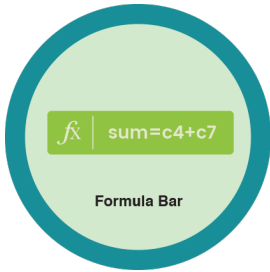
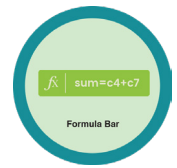
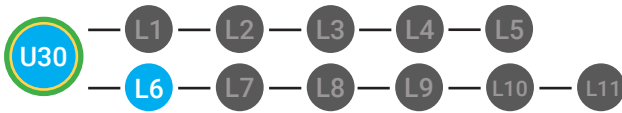
	A	B	C	D	E	F
1	Apples	Pears	Oranges	Bananas	Total fruits	
2		10	7	9	10	36
3						
4						
5						
6	Carrots	Potatoes	Kale	Tomatoes	Total Vegetable	
7		7	12	20	6	45
8						
9						
10						
11						
12						
13						
14						
15						

**What is the formula of the highlighted cell?**

---



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## T2 FORMULA

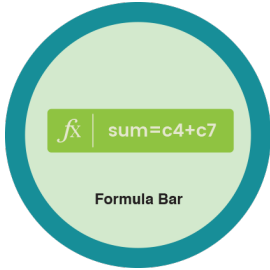
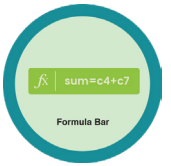
### EXIT TICKET | 30.6.6.2

**Directions:** Circle or point to the Formula Bar on this spreadsheet. What is the formula of the highlighted cell? Circle the answer on the multiple choice question.

	A	B	C	D	E	F
1	Apples	Pears	Oranges	Bananas	Total fruits	
2		10	7	9	10	36
3						
4						
5						
6	Carrots	Potatoes	Kale	Tomatoes	Total Vegetable	
7		7	12	20	6	45
8						
9						
10						
11						
12						
13						
14						
15						

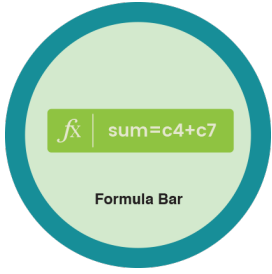
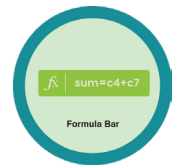
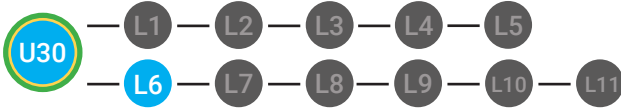
**What is the formula of the highlighted cell?**

- a. =SUM(A4+B6+C7+D10)
- b. =SUM(A2+B2+C2+D2)
- c. =SUM(A3+B3+C3+D3)
- d. =SUM(A6+B7+C8+D2)

**T3 TRACE 'N' LEARN****EXIT TICKET | 30.6.6.3**

Formula Bar

The Formula Bar is located at the top of your sheet under the Toolbar.



# MY DIGITABILITY EARNINGS TRACKER

## Unit 30: Google Sheets Interface | 30.6.7

**DIRECTIONS:** Keep this page safe! After each lesson, mark down the date and the dollars you earned.

**Name:** \_\_\_\_\_

	DATE:	DOLLARS EARNED:
LESSON 1: Google Sheets File Name		
LESSON 2: Google Sheets Folder Icon		
LESSON 3: Menu Bar		
LESSON 4: Toolbar		
LESSON 5: Cells		
LESSON 6: Formula Bar		
LESSON 7: Columns and Rows		
LESSON 8: Add Sheets Button		
LESSON 9: Collaborator Bubbles		
LESSON 10: Comments in Google Sheets		
LESSON 11: Google Sheets Interface Master Badge		

**TOTAL DOLLARS EARNED:**