Multiplication & Division Strategies

Supports Bridges Grade 5, Unit 4, Module 1, Session 3 & Session 4

Overview

This Tech-Enhanced Activity is based on learning in Sessions 3 and 4. The work supports students in exploring and using multiple strategies for multiplication.

Preview this content with a short video.

	Students will:	Assets
Part 1	Solve a multiplication problem, examine multiple strategies for solving the same problem, and compare and contrast their method for solving with another strategy.	Exploring Strategies [Slides]
<u>Part 2</u>	Review multiplication strategies and solve problems that involve multiplying a decimal by a whole number.	Callie's Cake Pops [Slides]
Part 3	Review and reflect on sample student work, analyze several strategies for solving the same multiplication problem, and use a method of their choice to solve a multi-step word problem.	Multiplication Strategies [Slides]

Some tech skills your students will need:

- Upload an image to a Google Slide
- Drag and drop elements
- Type in text boxes

Content notes:

- The content of this TEA does not include the Doubling & Halving problem string from Session 3. However, the multiplication problem posed in Part 1 is the final problem of that problem string. This problem is used to review the strategies and models addressed in the three problem strings in this module: Boxes & Pencils, Half-Tens Facts, and Doubling & Halving.
- Part 2 aligns with the Callie's Cake Pops Problems & Investigations from Session 3. The three problems in this slide deck represent all of the questions found in the Callie's Cake Pops Student Book page.
- 3. Part 3 aligns with the Callie's Cake Pops math forum in Session 4. A unique problem to this TEA, "Can You Double Callie's Earnings," gives students another opportunity to apply multiplication of whole numbers and decimals to a profit scenario.

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Part 1: Exploring Strategies

Students solve a multiplication problem, examine multiple strategies for solving the same problem, and compare and contrast their method for solving with another strategy.

You will need your copy of:

Google Slides: Exploring Strategies (asynchronous or synchronous learning)

- English: <u>preview</u> | <u>copy</u>
- Spanish: preview | copy
- 1. Distribute the Google Slides to students via Google Classroom, email, or another preferred method and *make a copy for each student*.
- 2. Choose your delivery method:

 If delivering asynchronously Students self-pace through the slides. Students solve a problem and then review three strategies that might have been used to solve the problem. Students explain how one of the strategies relates to their own strategy. 	 If delivering synchronously Start a Zoom or Google Meet session. Open the slides and share your screen. Students do not yet need to open their copy. Read the problem on the first "How many cake pops?" slide and answer any questions that students have. Invite them to explain the situation in their own words. Have students open their copy of the slides. Invite students to work independently on the "How many cake pops?" slide. Reconvene and ask for student input on strategies used. Review the "How many cake pops sample work" slides together.
	 Review the "How many cake pops

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Part 2: Callie's Cake Pops

Students review multiplication strategies and solve problems that involve multiplying a decimal by a whole number.

You will need your copy of:

Google Slides: Callie's Cake Pops (asynchronous or synchronous learning)

- English: preview | copy
- Spanish: preview | copy
- 1. Preview the slideshow and choose your delivery method.
- 2. Distribute the Google Slides to students via Google Classroom, email, or another preferred method and *make a copy for each student*.

 If delivering asynchronously Students self-pace through the slides. Students review multiplication strategies and solve multistep problems. 	 If delivering synchronously Start a Zoom or Google Meet session. Open the slides and share your screen. Students do not yet need to open their copy. Read the prompt on the "Earning money" slide. Ask for student input and notate their thoughts on the blank thought bubbles. Add more thought bubbles as needed. Have students open their copy of the slides. Review the instructions on the "Callie's cake pops" slides and invite students to work independently or in small breakout groups to complete the work on the remaining slides in their deck.
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 Prior to Part 3, review student work from the "Callie's cake pops" slides. Student work from these slides can be used to customize the opening slides for Part 3 of this activity. Consider choosing 3–4 samples that feature different strategies.

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Part 3: Multiplication Strategies

Students review and reflect on sample student work, analyze several strategies for solving the same multiplication problem, and use a method of their choice to solve a multi-step word problem.

You will need your copy of:

Google Slides: Multiplication Strategies (asynchronous or synchronous learning)

- English: preview | copy
- Spanish: preview | copy
- 1. Preview the Google Slides. If possible, replace the "Student work" slides with your own students' work. See teacher notes in the slides, and then remove the notes to teachers from all slides.
- Students will be asked to compare their work from Part 2 with sample responses in Part 3. It will be helpful for students to have their work from Part 2 available or review it prior to beginning Part 3.
- 3. Distribute the Google Slides to students via Google Classroom, email, or another preferred method and *make a copy for each student*.
- 4. Choose your delivery method:

If delivering synchronously If delivering asynchronously • Students self-pace through the slides. Start a Zoom or Google Meet session. • Students review examples of sample Open the slideshow and share your student work and compare the screen. Students do not yet need to strategies they used to those shown. open their copy. • Students submit their work after • Facilitate a discussion of the sample student work on the "Callie's cake solving a similar problem using a pops student work" slides. Focus on strategy of their choice. strategies used and connections students make to their own work. Annotate the slides with summarized student input. • Have students open their copy of the slides. Review the instructions for completing the "Can you double Callie's earnings" problem and invite students to work independently or in small breakout groups.

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