PRESENTER SCRIPT · GRADE 5 · 5.M.4-5.M.5

Volume of Rectangular Prisms: teacher script

Use with the Lesson presenter (room page -> Lesson presenter). Slides show only student cues; this script has what to say. Students need the printed lesson worksheet and a pencil.

Presenter keys: Right/left arrows change slides. N shows short notes. T pauses the timer. P picks a student. F is fullscreen.

Response routine: Students write each answer on their worksheet, then show it with fingers (1 = A, 2 = B, 3 = C, 4 = D). Scan the room before revealing.

SLIDE 1: TODAY'S TARGET — 1 min

Say	Today's learning target is: "I can find the volume of rectangular prisms and composite figures and explain what volume means." Read it with me.
Say	Here is how you will know you have it: the success criteria. You will prove it on the exit ticket at the end of class.
Point to	The agenda and the key vocabulary. Tell students they need their notebook, guided notes page, and pencil.

SLIDE 2: WARM-UP — 0:00–0:08

Say	Turn to Part 2 of your lesson worksheet. Answer the three questions in complete sentences. You have 5 minutes of silent work. Go.
Do	Start the 8:00 timer. Circulate. At 5 minutes say: "Turn to your partner and compare answers for 2 minutes."
Look for	1) 15 cm^2. 2) Area covers a flat surface (square units). Volume fills a space (cubic units). 3) Answers vary. Find how many fit in one layer, then multiply by the number of layers.
Say	Call on 2-3 students for questions 1 and 2, then reveal. Say: "We will come back to question 3 at the end of class."

SLIDE 3: HOOK — 1 min

Say	Read the question on the screen: "How could you find how many sugar cubes fill a box without filling it?" Circle your prediction in Part 3 of your worksheet and write why. Then vote.
Background	Hold up (or describe) a tissue box. "How many sugar cubes would fill it? How could we find out without actually filling it?"
Do	Tap +1 for each vote. Do not give the answer. Say: "By the end of the lesson, you will be able to check your prediction."

SLIDE 4: LEARN 1: VOLUME FILLS SPACE — 3 min

Say	Area counts squares that cover a flat surface. Volume counts cubes that fill a space. Units are cubed: cm^3.
Worksheet	Say: "Part 5: fill in the blanks (A), do the task (B), write what your partner said (C), and answer the check (D)." Blank answers: Volume counts CUBES that fill a space. It is measured in CUBIC units. (tap "Show the missing words" after students try.)
Explore	Point to the model: A prism made of 1-cm cubes. Ask: "What do you notice?" Students do: Count the cubes in the prism by layers.
Turn and talk	Say: "Why is volume measured in cubic units instead of square units?" Start the 1:00 timer. Then pick a pair to share.
Check	Read the question aloud. Students write, then show fingers. Scan, then reveal. Answer: 24. 4 × 3 × 2 = 24.
If < 80% correct	Go back to the Explore box and model a second example out loud, then re-ask the check with a partner discussion first. See "Misconceptions to watch for" at the end of this script.

SLIDE 5: LEARN 2: LAYERS: V = L × W × H — 3 min

Say	Build one layer: length × width cubes. Stack layers: multiply by height.
Worksheet	Say: "Part 6: fill in the blanks (A), do the task (B), write what your partner said (C), and answer the check (D)." Blank answers: Volume = LENGTH × WIDTH × HEIGHT. (tap "Show the missing words" after students try.)
Explore	Students do: Write V = l × w × h and solve for a 5 × 2 × 3 box.
Turn and talk	Say: "Does it matter which face you call the base? Why or why not?" Start the 1:00 timer. Then pick a pair to share.
Check	Read the question aloud. Students write, then show fingers. Scan, then reveal. Answer: 30. 5 × 2 × 3 = 30.
If < 80% correct	Go back to the Explore box and model a second example out loud, then re-ask the check with a partner discussion first. See "Misconceptions to watch for" at the end of this script.

SLIDE 6: LEARN 3: V = B × H — 3 min

Say	B is the area of the base. V = B × h means base area times the number of layers.
Worksheet	Say: "Part 7: fill in the blanks (A), do the task (B), write what your partner said (C), and answer the check (D)." Blank answers: V = B × h, where B is the area of the BASE. (tap "Show the missing words" after students try.)
Explore	Students do: Find V for a box with base 6 cm^2 and height 4 cm.

Turn and talk	Say: "How is V = l × w × h the same as V = B × h?" Start the 1:00 timer. Then pick a pair to share.
Check	Read the question aloud. Students write, then show fingers. Scan, then reveal. Answer: 60. 12 × 5 = 60.
If < 80% correct	Go back to the Explore box and model a second example out loud, then re-ask the check with a partner discussion first. See "Misconceptions to watch for" at the end of this script.

SLIDE 7: LEARN 4: COMPOSITE FIGURES — 3 min

Say	Split a composite figure into rectangular prisms, find each volume, then add.
Worksheet	Say: "Part 8: fill in the blanks (A), do the task (B), write what your partner said (C), and answer the check (D)." Blank answers: For a COMPOSITE figure, split it into prisms and ADD the volumes. (tap "Show the missing words" after students try.)
Explore	Point to the model: A composite figure: two prisms side by side. Ask: "What do you notice?" Students do: Split the figure into two prisms and find each volume.
Turn and talk	Say: "How would you find the volume of an L-shaped room?" Start the 1:00 timer. Then pick a pair to share.
Check	Read the question aloud. Students write, then show fingers. Scan, then reveal. Answer: 32. 16 + 16 = 32.
If < 80% correct	Go back to the Explore box and model a second example out loud, then re-ask the check with a partner discussion first. See "Misconceptions to watch for" at the end of this script.

SLIDE 8: WORKED EXAMPLE (I DO) — 2 min

Say	Watch how I solve this. Write the final answer in Part 9 of your worksheet.
Think aloud	Draw a 4 × 3 × 5 prism. Think aloud: "The bottom layer is 4 by 3, so 12 cubes. There are 5 layers. 12 × 5 = 60 cubic units."
Reveal	Problem: a prism 4 cubes long, 3 wide, and 5 tall. | Step 1: One layer: 4 × 3 = 12 cubes. | Step 2: There are 5 layers. | Step 3: 12 × 5 = 60. | Answer: 60 cubic units. Formula: V = l × w × h.

SLIDE 9: WE DO — 2 min

Say	Now we solve one together in Part 10. Read the problem with me.
Do	Before revealing each step, ask: "What should we do next?" Take one answer, then tap "Show next step."
Steps	One layer: 5 × 3 = 15 cubes. | Stack 4 layers: 15 × 4 = 60. | V = 60 dm^3. | Since 1 dm^3 = 1 liter, the tank holds 60 liters.

Answer	60 liters

SLIDE 10: YOU DO — 2 min

Say	Now on your own: Part 11. Solve it with no talking. You have 2 minutes.
Answer	120. 20 × 6 = 120 cm^3.
Then	Students who got it: launch the room. Students who missed it: 3-minute reteach at your table, then start the room at the Explorer level.

SLIDE 11: WORK TIME: THE CASE OF THE STOLEN SAND — 0:20–0:48

Say	Open The Case of the Stolen Sand on your device. Type your name, choose the level I assigned, and begin. Whisper voice with your partner only.
Do	Start the 28:00 timer and leave this slide up. Circulate with the answer key.
Checkpoints	At 10 minutes: stage 2 done. At 20 minutes: stage 4 done; give a 5-minute warning for the final lock and turn-in.
Turn-in	Students tap "Copy my work" and paste it into the Canvas assignment (Text Entry).

SLIDE 12: DEBRIEF — 0:48–0:52

Ask	Explain why V = l × w × h works using the idea of layers. | How did you split a composite figure? | When would someone in real life need to know volume?
Say	Back to warm-up question 3 and our hook vote: were our predictions right? What evidence changed your mind?
Answer	Answers vary. Find how many fit in one layer, then multiply by the number of layers.

SLIDE 13: EXIT TICKET — 0:52–1:00

Say	Clear your desk except a pencil. Work silently and on your own. For every answer, write "I know because..." and use evidence.
Do	Hand out the exit ticket. Start the 8:00 timer. Collect and sort with page 3 (Mastered / Approaching / Beginning).

MISCONCEPTIONS TO WATCH FOR

- "Volume and area are the same." Area is 2-D square units; volume is 3-D cubic units.
- "Add the dimensions." Volume multiplies them.

- "Composite figures: multiply all the numbers you see." Split into separate prisms first.