



Grade 3 Module 1

Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

Lesson 6: The Unknown in Division and Arrays

Objective Interpret the unknown in division using the array model.	Materials <ul style="list-style-type: none"> Writing instrument
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Items to share with families in advance of the lesson:

- Links: Lesson 6 Daily Video, Student Edition (SE) Lesson 6
- Materials list
- Assignment: After watching the video, complete Problems 1, 2, and 5 from the Problem Set. Students should work on the Problem Set for 10 minutes and should try to complete as many of the assigned problems as they can. Optionally, provide additional suggestions for students who finish in less than 10 minutes.

Remote Learning Recommendations

	Pacing	Activity	Notes
Asynchronous	15–20 minutes	Daily Video	<p>Ideally, students should watch the video and complete the assignment 1 or 2 days before the synchronous meeting for this lesson.</p> <p>Video description:</p> <ul style="list-style-type: none"> Begins with an analysis of a picture that shows the relationship between equal groups and a matching array Models drawing an array to represent a division equation where the quotient represents the number of groups Models drawing an array to represent a division equation where the quotient represents the size of the groups Uses an array to relate the unknown factor in multiplication to the quotient in division Relates multiplication and division through a skip-counting activity
	10 minutes	Assignment	<p>The video asks students to complete Problems 1, 2, and 5 from the Problem Set.</p> <p>Consider encouraging students to complete additional problems if they finish in less than 10 minutes.</p>
Synchronous (Virtual or In-Person)	2–10 minutes	Welcome	Consider a routine designed to welcome students into your learning environment.
	2 minutes	Recommendations for Synchronous Learning	<p>Demonstrate where to find links and assignments for each day’s lesson.</p> <p>Practice using the features of your meeting platform:</p> <ul style="list-style-type: none"> Mute and unmute the microphone on your device. Hold a piece of paper up to the camera and make sure it is visible to everyone. <p>Establish virtual classroom rules and engagement practices:</p> <ul style="list-style-type: none"> Show students how to snap their fingers in front of the camera to show they agree with something a peer says. Instruct students to raise their hands in front of the camera when they want to share. Show students how to enter a response to a question in the chat.

In-Person Delivery (Optional)	3 minutes	Group Counting	<p>Follow the Fluency activity Group Counting, found in the Teacher Edition (TE) for this lesson.</p> <p><i>“Let’s do some group counting.”</i></p>
	5 minutes	Divide Equal Groups	<p>Follow the Fluency activity Divide Equal Groups, found in the TE for this lesson.</p> <p><i>“Let’s think about what the number of groups shows us.”</i></p>
Synchronous (Virtual or In-Person)	2 minutes	Focus of Today’s Lesson	<p>Show a 3×5 array, along with the number sentences $3 \times 5 = 15$ and $15 \div 3 = 5$.</p> <p><i>“In the video for Lesson 6, we made connections between arrays and multiplication and division. Let’s continue thinking about what we learned in the video.”</i></p> <p>Students may require additional support with this concept. Consider prompting students to notice arrays around the room and to think of arrays in real-world situations. Have students then relate those arrays to division equations.</p>
	7 minutes	Application Problem	<p>Present the Application Problem from the SE, either under the document camera or by screen sharing the PDF of the page or the Topic Facilitation slides.</p> <p>Use independent practice and the Read–Draw–Write process and have students record their work in their books, on a clean sheet of paper, or by using the annotation features of the fillable PDF. Refer to the TE for additional notes on facilitation.</p>
	7 minutes	Student Debrief	<p>The Student Debrief is intended to invite reflection and active processing of the total lesson experience. Refer to the TE for additional notes on facilitation.</p> <p>Share the Topic Facilitation slides for Lesson 6 as you lead the debrief.</p> <p><i>“How do arrays represent both multiplication and division?” (Connection)</i></p> <p><i>“What is the relationship between the quotient in division and the unknown factor in a related multiplication equation?” (Connection)</i></p> <p>As you facilitate the debrief, take the opportunity to review and reinforce vocabulary presented in the lesson: unknown factor.</p>
	3 minutes	Exit Ticket	<p>Assign the Exit Ticket to be completed and submitted either while in the meeting or asynchronously after the meeting.</p> <p>For guidance on using Exit Tickets to connect between lessons, visit the TEKS Teacher Resource Page.</p>