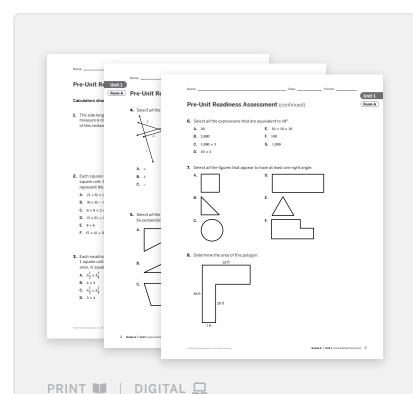
# Differentiating instruction

## Multiple pathways to the math

Working with advisor Dr. Paulo Tan and experts at the English Learners Success Forum (ELSF), the Amplify Math curriculum team has developed intentional and point-ofuse differentiated supports that invite all students into the mathematical conversation.





# **Pre-Unit Readiness Assessment**

Amplify Math's Pre-Unit Readiness Assessment helps teachers identify student needs. The problems of the Pre-Unit Readiness Assessment cover the lessons' prerequisite skills to help teachers know where they might provide additional support before and during the lessons in the unit, informing instruction by identifying specific student needs for the unit. Using these insights, teachers can use the flexible built-in support to differentiate appropriately at point of use.



## Accessibility: Guide Processing and Visualization

If available, play the audio of a heart beating for five seconds to demonstrate how to count a heartbeat. Alternatively, if students have difficulty finding and counting their pulse, play the audio of a heart beating for 20 seconds and have students use that value to complete the Warm-up.



For students who need additional support determining the slope of a line (from the Pre-Unit Readiness Assessment, Problem 4):

Use Problem 4 from the Pre-Unit Readiness Assessment and have students draw several slope triangles. Remind students that the slope is the vertical change divided by the horizontal change.

# Accessibility and extension supports

Every Amplify Math lesson begins with a warm-up activity. But some students may require additional support with unfinished learning to get them ready for the grade-level content addressed in a particular lesson. Based on students' performance on formative practice problems, students who need this support are automatically identified for teachers, and given differentiated Power-ups to the grade-level content.

Students are never labeled as above or below grade level in Amplify Math. The wide range of differentiated instructional supports are categorized as either **accessibility** or **extension** supports within the Teacher Edition. These supports can be implemented flexibly as students may not need support for every lesson, but instead a particular activity within a lesson.

Grounded in the Universal Design for Learning (UDL) framework and guidelines (CAST, 2018), our accessibility supports provide students with the help they may need on a given activity and makes the content accessible for all students.

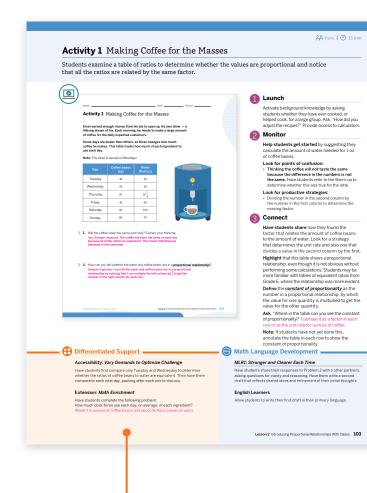
#### Examples of accessibility supports include:

- · Removing or restricting physical requirements (for example, providing measurements instead of having students do the measuring).
- · Scaffolding directions.
- · Chunking the task into smaller, more manageable parts.
- · Providing checklists, tables, and graphic organizers.
- Optimizing access to tools, such as physical and digital manipulatives, and technology.
- · Providing options for students to use annotations and color coding to highlight connections.

Extension support provides teachers with opportunities for students to examine grade-level mathematics at a deeper level as opposed to introducing future grade or course mathematics.

## **Extension support** subcategories include:

- Math Enrichment
- · Math Around the World
- · Interdisciplinary Connections





# Differentiated Support

### Accessibility: Vary Demands to Optimize Challenge

Have students first compare only Tuesday and Wednesday to determine whether the ratios of coffee beans to water are equivalent. Then have them compare to each next day, pausing after each one to discuss

#### Extension: Math Enrichment

Have students complete the following problem: How much does Kiran use each day, on average, of each ingredient? About 4.8 ounces of coffee beans and about 56 fluid ounces of water.