

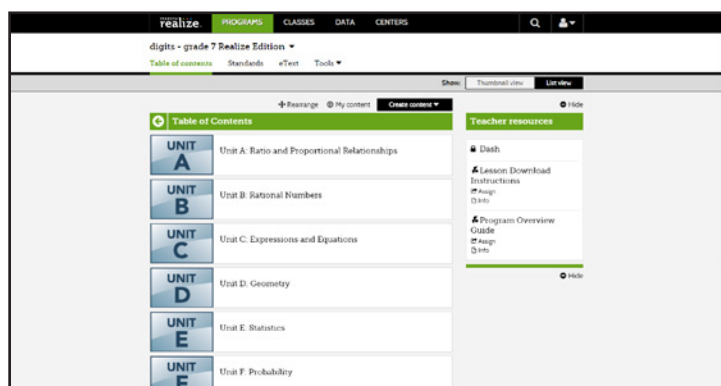
## Teacher Resources

### Introduction

This guide introduces the teacher resources in your digits® program. It explores the valuable supports you can use to guide your instruction.

### Table of Contents

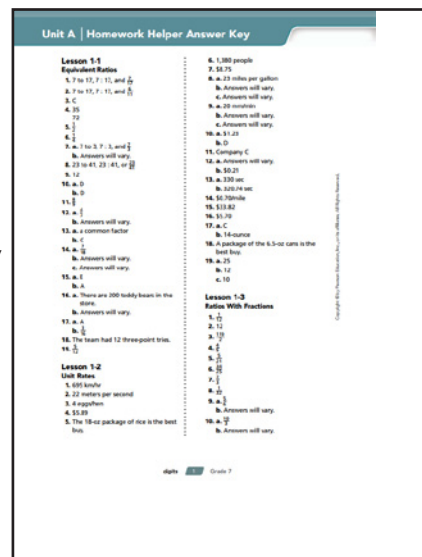
When you enter your digits® course on Savvas Realize™, the first stop is the Table of Contents. Here, you will find your first exposure to the Teacher resources panel. Note **T** Show teacher resources at the top of the screen. Click this to view the teacher resources associated with the level of content you are accessing. Hide the resources at any time by clicking **Hide**.



### Unit

As you launch a Unit, locate additional resources to support your instruction. Find printable versions of Unit-level assessments with answer keys, or open the Unit's Homework Helper answer key.

Access Teacher Guides for the Unit Enrichment Project, as well as the Unit instruction. Use the latter to identify pacing as well as information about the Essential Questions, Common Core State Standards, and Math Background. During your instruction, open the Teacher Guide on your mobile device via Savvas Realize™ or Dash, or reference the print In-Class Teacher Notes.



Note the individual T Teacher resources links. These call out the availability of Teacher resources for each item.

Unit A: Ratio and Proportional Relationships

- Unit A Enrichment Project  
Assign Info **T** Teacher resources
- Unit A Readiness Assessment  
Assign Info **T** Teacher resources Remediation

**TOPIC 1**  
Topic 1: Ratios and Rates

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## Topic

Notice similar resources for the Topic level with Teacher Guides for the Topic Enrichment Project and content, as well as a printable Topic 1 Test and answer key. Also, note the individual resources associated with each item.

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## Lesson

At the lesson level, find a variety of resources including a Lesson Plan, leveled homework and practice with keys, Student Companion and answers, and a Teacher's Guide. As you prepare to launch a lesson, consider accessing the guide on your mobile device via Dash. If you don't have access to a mobile device, refer to the print In-Class Teacher Notes. As you deliver your lesson, consult the notes to support your instruction.

Lesson 1-2: Unit Rates

Interactive Learning

- 1-2 Launch  
Assign Info
- 1-2 Key Concept  
Assign Info
- 1-2 Part 1  
Assign Info
- 1-2 Part 2  
Assign Info
- 1-2 Part 3  
Assign Info

Teacher resources

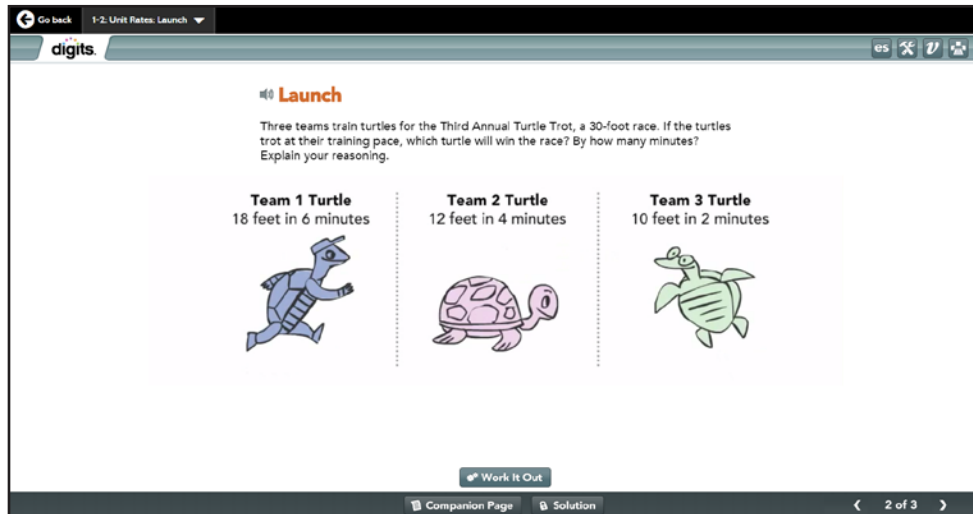
- 1-2 Editable Lesson Plan  
Info
- 1-2 Homework G with Answer Key
- 1-2 Homework K with Answer Key
- 1-2 Mixed Review with Answer Key
- 1-2 Student Companion  
Assign
- 1-2 Student Companion with Answers
- 1-2 Teacher Guide  
Info

Start by reviewing the Lesson Objective, Focus Question, Math Background, and Author Intent for context around the lesson's content.

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## Launch

As you deliver the Launch, use the guiding questions to activate students' prior knowledge before, during, and after your instruction.



The screenshot shows a digital interface for a math problem. At the top, there is a navigation bar with a "Go back" button, a dropdown menu showing "1-2: Unit Rates: Launch", and the "digits" logo. Below the navigation bar, the word "Launch" is displayed in orange. The main text reads: "Three teams train turtles for the Third Annual Turtle Trot, a 30-foot race. If the turtles trot at their training pace, which turtle will win the race? By how many minutes? Explain your reasoning." Below this text, there are three columns, each representing a team's turtle. Team 1 Turtle is described as "18 feet in 6 minutes" and is accompanied by a blue cartoon turtle. Team 2 Turtle is described as "12 feet in 4 minutes" and is accompanied by a purple cartoon turtle. Team 3 Turtle is described as "10 feet in 2 minutes" and is accompanied by a green cartoon turtle. At the bottom of the interface, there is a "Work It Out" button and a footer with "Companion Page" and "Solution" links, along with a page indicator "2 of 3".

Apply additional point-of-use support. This includes scripting, questions, and suggestions to expand students' understanding. There is specific and unique guidance for each part of the lesson: Launch, Key Concept, Part 1, Part 2, Part 3, and Close and Check.

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## Examples and Key Concept

After the Launch, transition to the Key Concept. Apply the ELL Support as necessary, and review the Teaching Tips. Ask the Questions for Understanding to ensure students have a grasp of the lesson's key concept.

Next, deliver the Examples. Note the objectives for each part of the lesson, so you know exactly what your students should learn from the task at hand. For this Example, the Instructional Design provides information on how to present the task and facilitate learning. Call on students to find each unit rate. Then, drag the shirt tiles that represent the best and worst buys to the appropriate areas.

### **Instructional Design**

You can call on students to find each unit rate on the whiteboard. Once they have found all four unit rates, have a volunteer drag the tiles that represent the best and worst buys to the appropriate areas. When you click the Check button, any incorrect answers will snap back to their original positions. Use this opportunity to review, as a class, how you found each unit rate and to reread the question carefully.

Note that this problem assumes the T-shirts are all of similar quality. If students ask whether the shirts are different brands or sizes, tell them to assume the only difference is the price.

Use the Jay Says! button to point out why the highest (or lowest) unit rate is not always the best. As your students solve the problem, what can you ask that will elicit understanding and promote discourse?

The digits® program distinguishes effective teacher questioning as a best practice for engaging students and building learning opportunities. Find Questions for Understanding throughout the entire lesson. Use these questions to guide students' thinking and prompt mathematical discussion.

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## Close and Check

Revisit the Focus Question in Close and Check. How do you know when students understand the answer to the Focus Question? See sample answers, notes, connections, and questions that describe what to look for as evidence of learning.

Remember that the Teaching resources panel is part of the complete digits® eText Teacher Guide. Whether your preference is to view your lesson support online or to have in hand with the print In-Class Teacher notes, the digits® program provides accessible teaching support right where you need it.

### CLOSE AND CHECK (8 MIN)

#### **Focus Question Sample Answer**

A ratio is a rate if it compares two quantities measured in different units. Because unit rates give you a rate per one item, they are easier to compare and make sense of. You can use unit rates to quickly find equivalent rates.

#### **Focus Question Notes**

Look for answers that indicate a rate is a ratio with 1 in the denominator. By comparing a quantity to one unit, it is easier to determine the greatest or least amount per unit from several rates. Such comparisons can help determine which product is a better buy or which speed is the greatest.

Stress that rate problems are typically faster when you find the unit rate first and then use the unit rate to find an equivalent rate that contains the term that you know and the term that you need.

#### **Essential Question Connection**

The Focus Question asks how to identify rates and how unit rates help solve problems, which refers to the Essential Question: "How do you distinguish the different kinds of rates? What kind of real-world relationships are rates?" Use the questions that follow to establish this connection.

- How are rates the same as other ratios? How are they different from other ratios? [Sample answer: A rate compares one quantity to another, just like any other ratio. A rate is different because its terms have different units that cannot cancel out.]
- How can you use unit rates to help make decisions in the real world? [Sample answer: I can compare the prices of two sizes of the same item by comparing the unit prices to decide which one costs less per unit.]

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## Review

This guide examined the Teacher resources for your digits® program. It explored the contents of the Teacher resources panel and showed you how to use these resources to facilitate a lesson.