enVision Mathematics Grades 6-8 © 2021 Teaching a Lesson

Introduction

Hi, **enVision** Mathematics teachers!

I'm glad you want to learn more about teaching an **enVision** Mathematics lesson. Let's look at the instructional design of the program and explore the 3-step lesson structure.

Instructional Design

enVision Mathematics topics are designed to help students develop content connections. Each topic contains lessons, projects, and activities that are connected by a common focus.

The Topic Opener helps you introduce the Essential Question and a variety of exciting activities to your students.

Each topic contains a 3-Act Math lesson that invites students to use mathematical models to solve real-world problems by applying concepts they're learning.

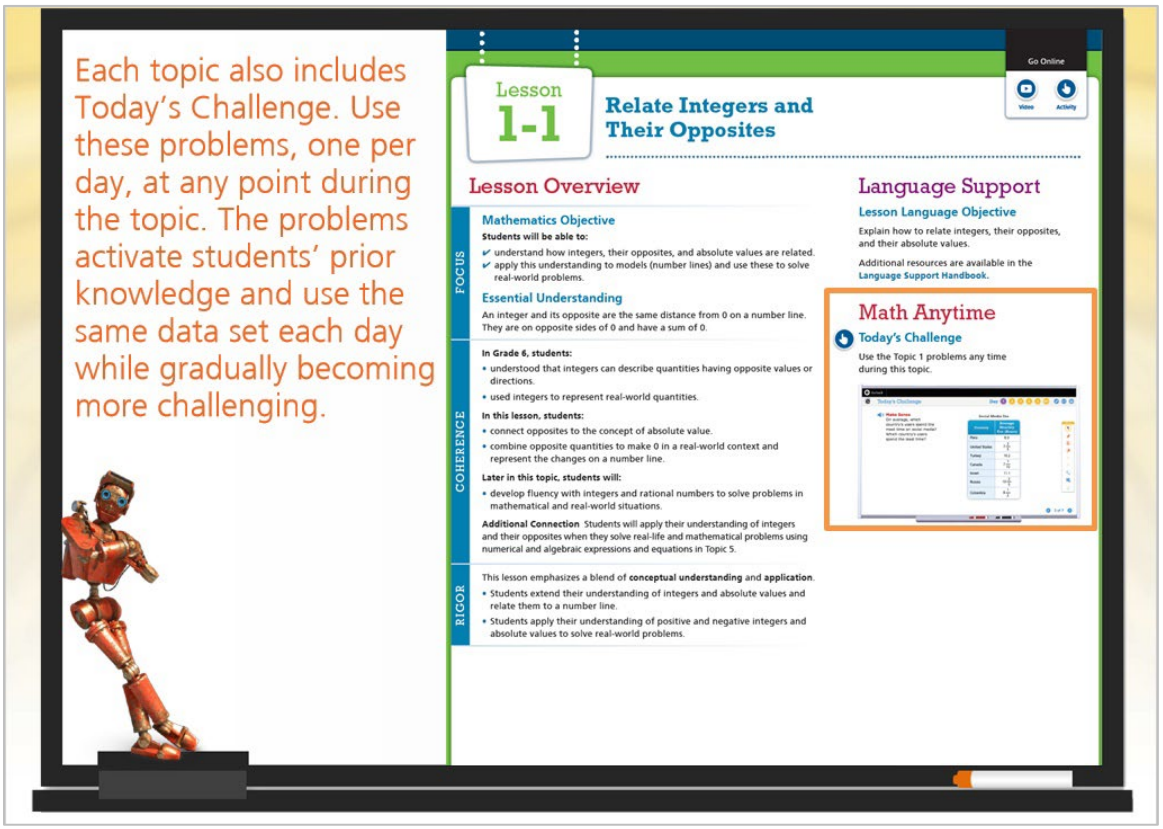
Each topic also has an **enVision** STEM Project that students can work on anytime to help them connect math concepts to the real world.

Use the Get Ready! section to activate and assess students' prior knowledge as well as support vocabulary and language development skills.

At the start of each topic, have students make a selection in Pick a Project to give them an opportunity to apply new math concepts throughout the topic.

Next, let's dig in to the instructional design of **enVision** Mathematics 3-step lessons.

Quick Tip

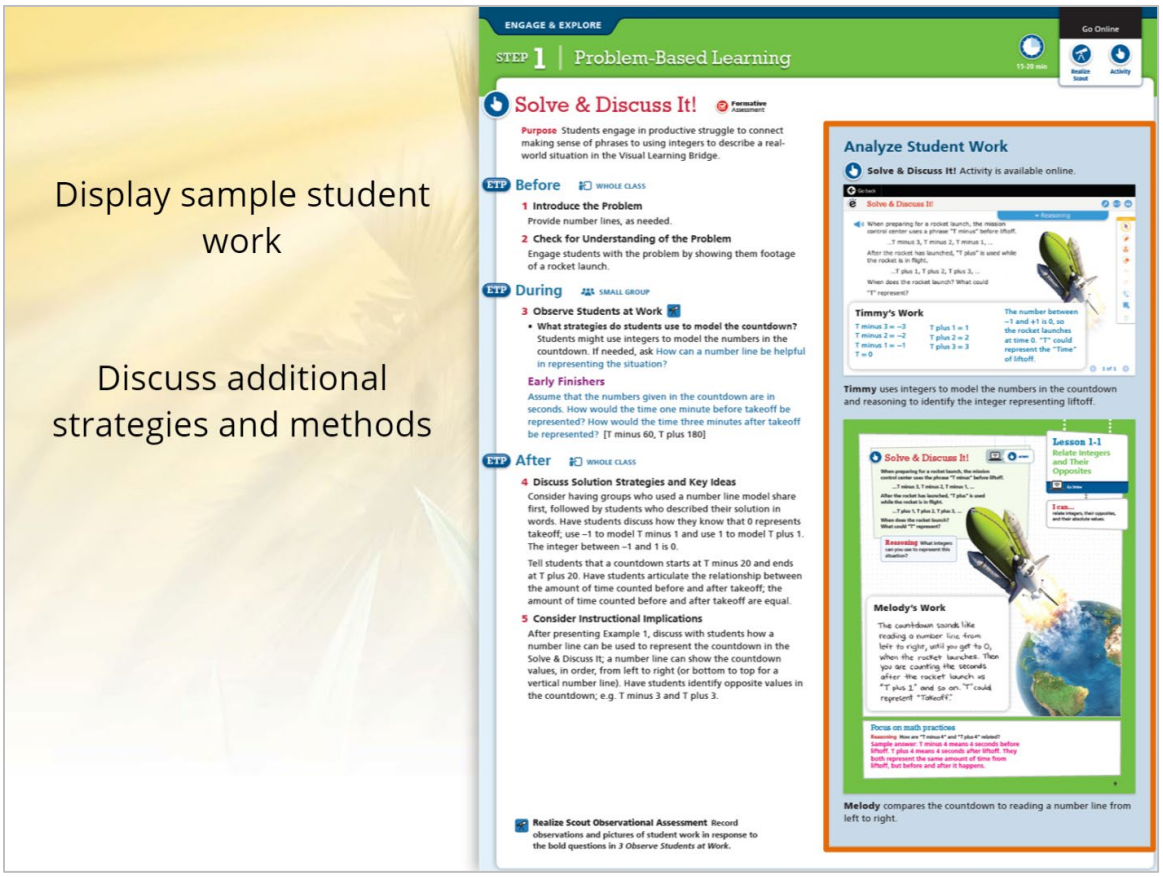

Each topic also includes Today's Challenge. Use these problems, one per day, at any point during the topic. The problems activate students' prior knowledge and use the same data set each day while gradually becoming more challenging.
Lesson 1-1
Relate Integers and Their Opposites
Go Online
Video
Activity
Lesson Overview
FOCUS
Mathematics Objective
Students will be able to:
✔ understand how integers, their opposites, and absolute values are related.
✔ apply this understanding to models (number lines) and use these to solve real-world problems.
Essential Understanding
An integer and its opposite are the same distance from 0 on a number line. They are on opposite sides of 0 and have a sum of 0.
COHERENCE
In Grade 6, students:
• understood that integers can describe quantities having opposite values or directions.
• used integers to represent real-world quantities.
In this lesson, students:
• connect opposites to the concept of absolute value.
• combine opposite quantities to make 0 in a real-world context and represent the changes on a number line.
Later in this topic, students will:
• develop fluency with integers and rational numbers to solve problems in mathematical and real-world situations.
Additional Connection Students will apply their understanding of integers and their opposites when they solve real-life and mathematical problems using numerical and algebraic expressions and equations in Topic 5.
RIGOR
This lesson emphasizes a blend of conceptual understanding and application.
• Students extend their understanding of integers and absolute values and relate them to a number line.
• Students apply their understanding of positive and negative integers and absolute values to solve real-world problems.
Language Support
Lesson Language Objective
Explain how to relate integers, their opposites, and their absolute values.
Additional resources are available in the Language Support Handbook.
Math Anytime
Today's Challenge
Use the Topic 1 problems any time during this topic.

3-Step Lessons

enVision Mathematics uses a 3-step lesson structure to help your students build deep conceptual understanding, develop procedural fluency, and practice application skills.

First, review the Lesson Overview for all the important planning information to help you get ready for the day's lesson.

Step 1: Problem-Based Learning



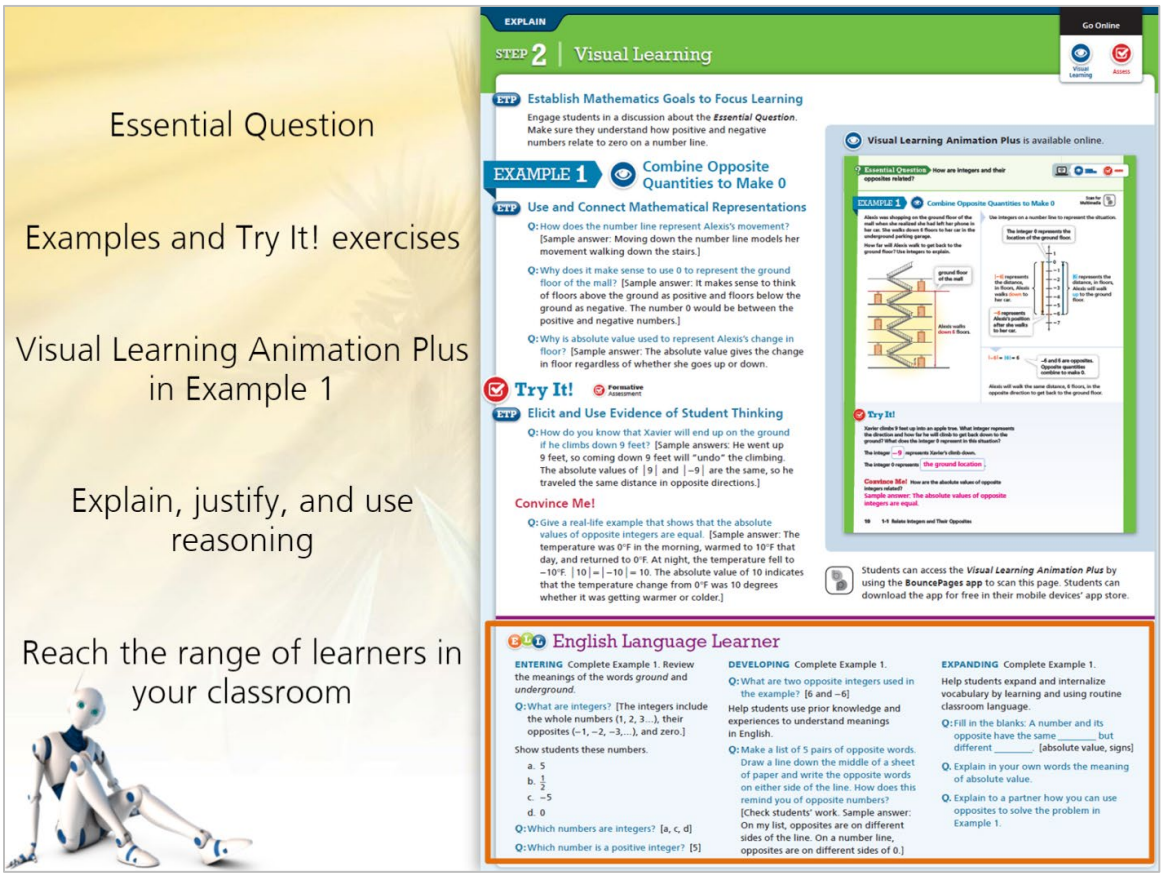
In Step 1: Problem-Based Learning, introduce concepts by having students work on the lesson opener. Display the problem via Savvas Realize™ so you and your students can use the Desmos interactivities or Draw Pad tools to share ideas.

Using the Before, During, and After guidance in the Teacher's Edition, give students opportunities to discuss and share solution strategies.

Use the blue guiding questions to facilitate classroom conversations that help students build understanding. While students work, collect formative assessment data.

Have students share their work and discuss each other's ideas. Consider displaying the sample student work from Savvas Realize to spark conversations about additional strategies and methods.

Step 2: Visual Learning



In Step 2: Visual Learning, start by discussing the Essential Question to help students focus on the learning goals of the lesson.

Then present a series of visual Examples and Try It! exercises to help students see the math and connect their thinking from the lesson opener to the new concepts in the lesson.
Show the Visual Learning Animation Plus, which is part of Example 1, on Savvas Realize. Use the blue questions in the Teacher's Edition to lead a whole-class discussion.

Then have students complete the Convince Me! activity to see if they can explain, justify, and use reasoning to show their understanding.

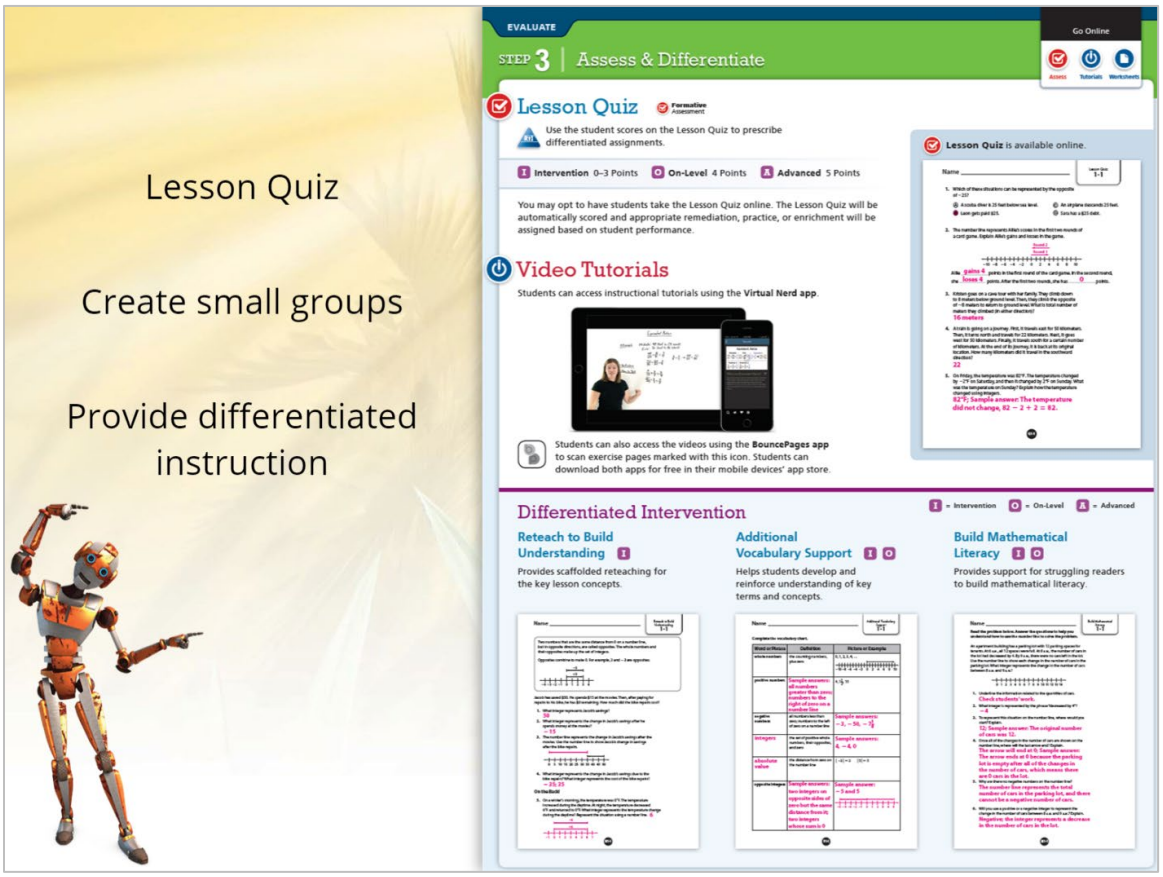
Use the strategies in the English Language Learner, Response to Intervention, and Enrichment notes to reach the range of learners in your classroom.

Continue presenting Examples and Try It! exercises. Then bring it all together by discussing the Key Concept.

Assign the formative assessments Do You Understand? and Do You Know How? to check for understanding. Based on the results, lead students through Additional Examples as needed.

Finally, assign students independent work using the print or online Practice & Problem Solving assignments.

Step 3: Assess and Differentiate

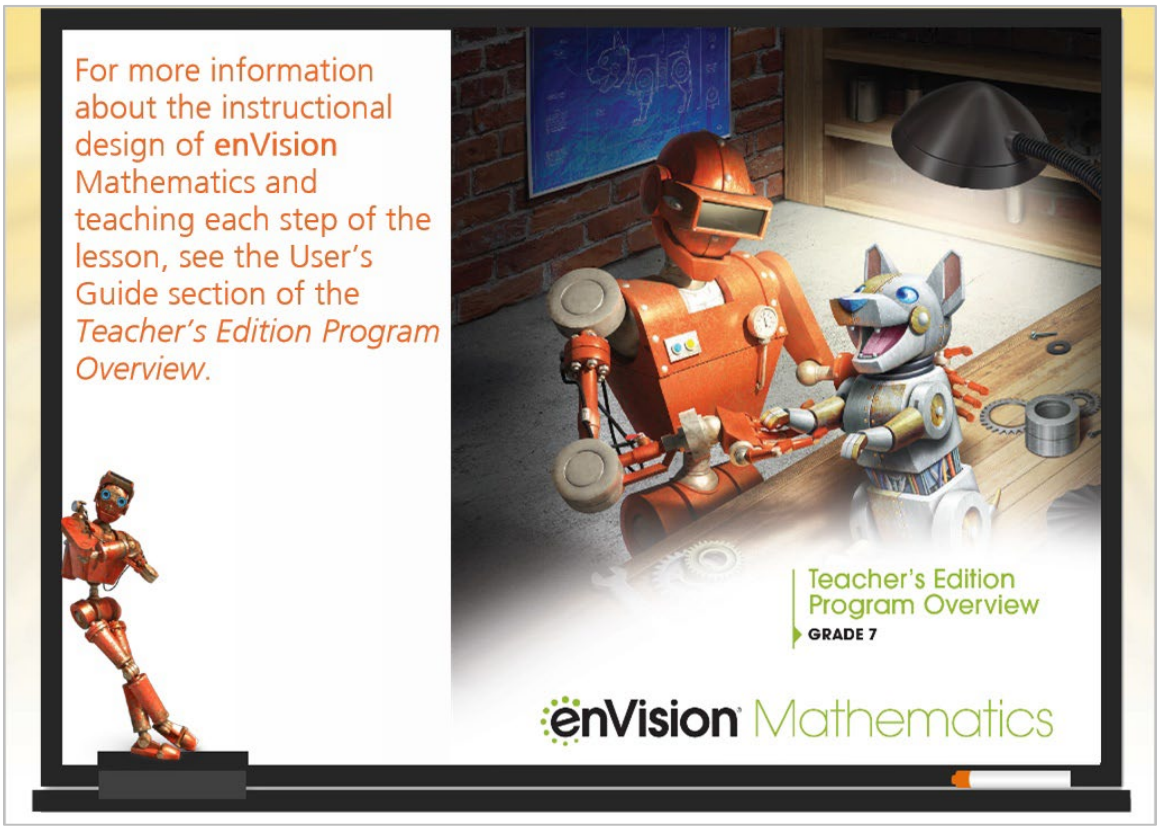


In Step 3: Assess and Differentiate, assign the Lesson Quiz in print or online. Use the results to help you create small groups so you can provide differentiated instruction.

While you work with small groups using differentiated resources listed in the Teacher's Edition, other students can work on a variety of activities including Math Tools and Games, Pick a Project, and **enVision** STEM Project.

Use a variety of print and digital Additional Practice options to assign practice or homework.

Quick Tip


For more information about the instructional design of enVision Mathematics and teaching each step of the lesson, see the User's Guide section of the *Teacher's Edition Program Overview.*
Teacher's Edition
Program Overview
GRADE 7
enVision Mathematics

Closing

Thanks for learning more about teaching a lesson with **enVision** Mathematics

Be sure to check out more resources on My Savvas Training when you're ready to learn more about **enVision** Mathematics!