



Grades 6-8

INSTRUCTIONAL DESIGN

STEP 1 PROBLEM-BASED LEARNING



STEP 2 VISUAL LEARNING



STEP 3 ASSESS & DIFFERENTIATE

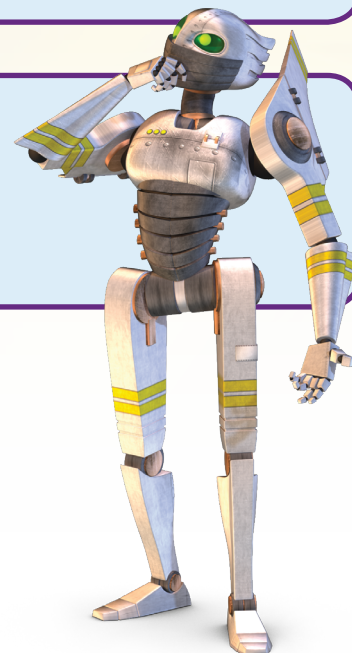
Solve & Discuss It!/Explore It!/Explain It! problem-based learning opens each lesson with a rich problem for students to discuss and share solution strategies. Problem-based learning is an educational approach in which complex problems serve as the context and the stimulus for learning.

Visual learning example connects student thinking from the Solve & Discuss It!/Explore It!/Explain It! to the Lesson.

“The coupling of using a problem to introduce a concept and then using the students’ thinking and work solving that problem as a bridge to making the important math explicit is one of, if not the strongest research findings in math education that’s ever been found.”

Randy Charles, Lead Author

A variety of engaging differentiation options in each lesson encourage and challenge students of all learning levels.





STEP 1
Solve & Discuss It/
Explore It!/Explain It!
(15-20 minutes)



STEP 2
Visual Learning



Practice &
Problem Solving



STEP 3
Assess and Differentiate
(15-30 minutes)

WHAT TEACHERS DO

Facilitate whole-class discussion; support productive struggle; observe students at work; ask guiding questions; display and discuss student thinking and strategies.

Use blue Guiding Questions to continue discussion and make important math ideas explicit. Project Visual Learning Animation Plus for whole-class discussion.

Use Try It! as a Formative Assessment tool to check for understanding after every Example prior to Practice & Problem Solving.

Assign selected exercises in print Student's Edition, online Realize Reader, or MathXL for School. Use Lesson Quiz to prescribe differentiated resources.

Lesson Quiz scores are used to prescribe intervention, on-level, or advanced resources. Assign Additional Practice Workbook, online Interactive Additional Practice Workbook, MathXL for School practice and enrichment, or Adaptive Practice.

WHAT STUDENTS DO

Work with partner or small group; engage in problem where new ideas are embedded; solve the problem any way they choose; share and compare solution strategies.

Follow Visual Learning Example in Student's Edition to reinforce the Animation. Demonstrate understanding during Convince Me! Use interactivities powered by Desmos embedded throughout the program.

Students work individually, in small groups, or in pairs to demonstrate understanding of concept and application.

Work independently to build proficiency. Differentiation may be completed independently or in small groups. Students use the Lesson Self Assessment to reflect on their understanding of the language and math goals.

Work independently, with a partner, or in small group. Help is available from a Virtual Nerd Video that can be accessed through a mobile device.