

enVision[®] Mathematics

Working with Small Groups



Planning for Small Groups – Topic Level

We know every student is different. Reach the range of learners in your classroom by planning at the topic level with **enVision Mathematics** differentiated resources.



In your Teacher's Edition, the Differentiated Instruction topic page has an overview of differentiation resources. Gather resources for the topic as you plan.

TOPIC 1 Differentiated Instruction
Understand Multiplication and Division of Whole Numbers

1 Intervention 2 On-Level 3 Advanced

ONGOING INTERVENTION

1 **1 BIT** During the core lesson, monitor progress, reteach as needed, and extend students' thinking.

Guiding Questions

- **In the Teacher's Edition** Guiding questions are used to monitor understanding during instruction.
- **Online Guiding Questions** Guiding questions are also in the online Visual Learning Animation Plus.

Prevent Misconceptions

This feature in the Teacher's Edition is embedded in the guiding questions.

Error Intervention: If... then...

This feature in the Teacher's Edition is provided during Guided Practice. It spotlights common errors and gives suggestions for addressing them.

Reteaching

Reteaching sets are at the end of the topic in the Student's Edition. They provide additional examples, reminders, and practice. Use these sets as needed before students do the Independent Practice.

Higher Order Thinking

These problems require students to think more deeply about the rich, conceptual knowledge developed in the lesson.

Practice Buddy Online

• Online auto-scored practice is provided for each lesson. On-screen learning aids include Help Me Solve This and View an Example.

STRATEGIC INTERVENTION

2 **2 BIT** At the end of the lesson, assess to identify students' strengths and needs and then provide appropriate support.

Quick Check

- **In the Student's Edition** Assess the lesson using 3 items checked in the Teacher's Edition.
- **Online Quick Check** You can also assess the lesson using 5 online, machine-scored items.

Intervention Activity

Teachers work with struggling students.

Technology Center **1 2 3**

- **Digital Math Tools Activities** reinforce the lesson content or previously taught content using a suite of digital math tools.
- **Online Games** practice the lesson content or previously taught content.

Reteach to Build Understanding **1**

This is a page of guided reteaching.

Build Mathematical Literacy **1 2**

Helps students read math problems.

Enrichment **2 3**

Enhances students' thinking.

Activity Centers **1 2 3**

- **Pick a Project** lets students choose from a variety of engaging, rich projects.
- **enVision® STEM Activity** is related to the topic science theme introduced at the start of the topic.
- **Problem-Solving Levelled Reading Mat** is used with a lesson-specific activity.

Additional Practice **1 2 3**

Use the leveled assignment to provide differentiated practice.

INTENSIVE INTERVENTION

3 **3 BIT** As needed, provide more instruction that is on or below grade level for students who are struggling.

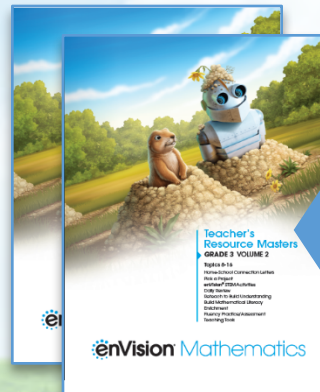
Math Diagnosis and Intervention System

- **Diagnosis** Use the diagnostic tests in the system. Also, use the item analysis charts given with program assessments at the start of a grade or topic, or at the end of a topic, group of topics, or the year.
- **Intervention Lessons** These two-page lessons include guided instruction followed by practice. The system includes lessons below, on, and above grade level.
- **Teacher Support** Teacher Notes provide the support needed to conduct a short lesson. The lesson focuses on vocabulary, concept development, and practice. The Teacher's Guide contains individual and class record forms and correlations to Student's Edition lessons.

Resources for Fluency Success

- A variety of print and digital resources are provided to ensure fluency success. See Steps to Fluency Success at the start of Topics 5 and 6.

10 Topic 1 Overview



Use your Teacher's Resource Masters to make copies of the Pick a Project, enVision® STEM Project, Reteach to Build Understanding, Build Mathematical Literacy, Enrichment, and/or Fluency Practice masters to use with small groups.

Consider laminating a few copies of masters to reuse.

Teacher's Resource Masters

Planning for Small Groups – Topic Level

Each lesson includes opportunities for students to work on Pick a Projects, Problem-Solving Leveled Reading Mats, **enVision** STEM Projects, Math Tools, and Math Games while you work with small groups. See the Topic Planner to get ready for the rotation of these activities throughout the topic.

Go online to plan and practice with the Math Tools and Math Games your students can use at a Technology Center while you work with small groups.

TOPIC 1 Topic Planner

Understand Multiplication and Division of Whole Numbers

| Lesson | Mathematics Objective | Essential Understanding | Vocabulary | Materials | Technology and Activity Centers | Standards |
|--|---|---|--|---|--|---|
| 1-1 <i>Relate Multiplication and Division</i> | Use repeated addition to show the relationship between multiplication and division. | Some real-world problems that involve joining or separating equal groups or making comparisons can be solved using multiplication. ... See p. 9A. | • Equal groups • Multiplication • Factors • Products • Divisions • Unknowns | • Two-color counters (or TT 9) | • Math Games • Pick a Project | 3.OA.A.1, 3.OA.A.3 Mathematical Practices MP.1, MP.4 |
| 1-4 <i>Division: How Many in Each Group?</i> | Use sharing to separate equal groups and think about division. | Sharing involves separating equal groups and is one way to think about division. | • Division | • Two-color counters (or TT 9) | • Math Tools • Pick a Project | 3.OA.A.2, 3.OA.A.3 Mathematical Practices MP.1, MP.4, MP.6 |
| 1-5 <i>Division: How Many Equal Groups?</i> | Use repeated subtraction to show the relationship between division and subtraction. | Some real-world problems that involve joining or separating equal groups or making comparisons can be solved using multiplication and division. Repeated subtraction involves separating equal groups and is one way to think about division. | None | • Two-color counters (or TT 9) | • Math Tools • enVision ® STEM Activity | 3.OA.A.2, 3.OA.A.3 Mathematical Practices MP.2, MP.4, MP.8 |
| 1-6 <i>PROBLEM SOLVING: Use Appropriate Tools</i> | Think strategically about available tools that can be used to solve problems. | Good math thinkers know how to pick the right tools to solve math problems. | None | • Two-color counters (or TT 9) • Centimeter grid paper (or TT 1) • Crayons • Cubes | • Math Games • Problem-Solving Reading Activity | 3.OA.A.2, 3.OA.A.3 Mathematical Practices MP.5, MP.1, MP.3, MP.4, MP.7 3.OA.A.1, 3.OA.A.2 |

Technology and Activity Centers

- Math Games
- Pick a Project

Lesson-specific ELL suggestions

are provided in all lessons in the program.

| Lesson | Mathematics Objective | Essential Understanding | Vocabulary | Materials | Technology and Activity Centers | Standards |
|--|---|---|------------|---|--|---|
| 1-4 <i>Division: How Many in Each Group?</i> | Use sharing to separate equal groups and think about division. | Sharing involves separating equal groups and is one way to think about division. | • Division | • Two-color counters (or TT 9) | • Math Tools • Pick a Project | 3.OA.A.2, 3.OA.A.3 Mathematical Practices MP.1, MP.4, MP.6 |
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Technology and Activity Centers

- Math Games
- Problem-Solving Reading Activity

TOPIC RESOURCES

Student's Edition

- **enVision**® STEM Project
- Review What You Know
- Fluency Practice Review
- Vocabulary Review
- Reteaching
- Topic Assessment Practice
- Topic Performance Task

Teaching Resources

- Home-School Connection
- Pick a Project Masters
- 3-Act Math Recording Sheet
- Language Support Handbook

Assessment Resources

- Fluency Practice/Assessment Masters
- Topic Assessment
- Topic Performance Task

Topic Support for Students

- Math Practices Animations
- Math Practices and Problem-Solving Handbook
- My Word Cards
- 3-Act Math Video

Topic Support for Teachers

- Topic Overview PD Video

Assessment Resources

- Online Topic Assessment
- ExamView® Test Generator
- Practice Buddy Fluency Practice/Assessment

Planning for Small Groups – Lesson Level

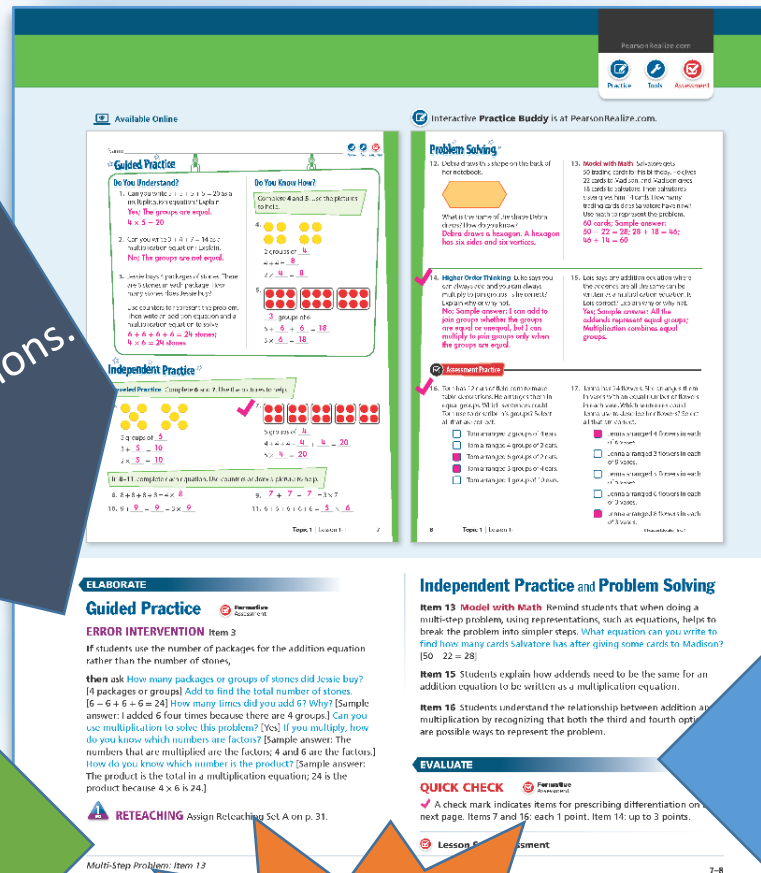
You'll find formative assessment resources and differentiation tips in each step of **enVision** Mathematics lessons.

Look for Error Intervention notes to help you address student misconceptions.

Use Reteaching
Sets to help
struggling students
before they work
on Independent
Practice and
Problem Solving.

▶ You can create groups online!

While students work independently, use student results on the formative Quick Check at the end of Step 2 to determine how to group your students for Step 3.



Planning for Small Groups – Lesson Level

Plan the Intervention Activity as a teacher-led small group activity for struggling students.

Explore the variety of engaging differentiation options in Step 3 of each lesson. Use the Intervention, On-Level, and Advanced (I, O, A) icons to plan differentiated activities for each small group or center.

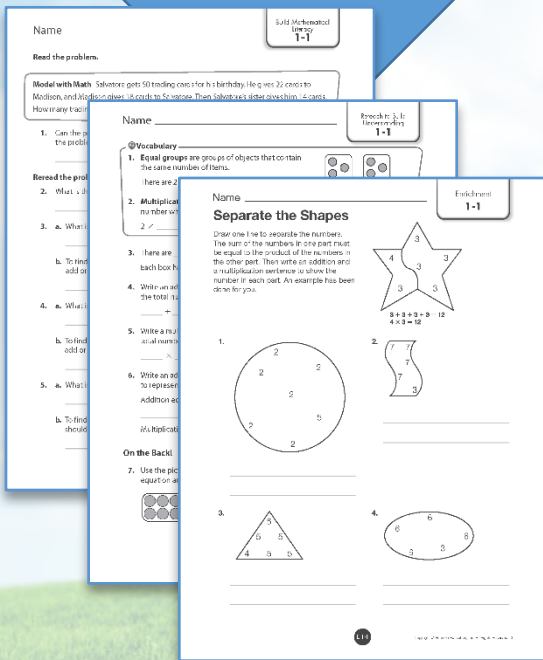
Set up a Technology Center so students can work individually or in pairs.

Plan how you'll support differentiated small groups using the Reteach to Build Understanding, Build Mathematical Literacy, and/or Enrichment masters.

Create areas where other students can work on Activity Centers and/or leveled Additional Practice while you work with small groups.

Teacher-led Small Groups

Use the Reteach to Build Understanding, Build Mathematical Literacy, and/or Enrichment masters to offer differentiated small groups an activity that meets their needs.



INTERVENTION ACTIVITY 1

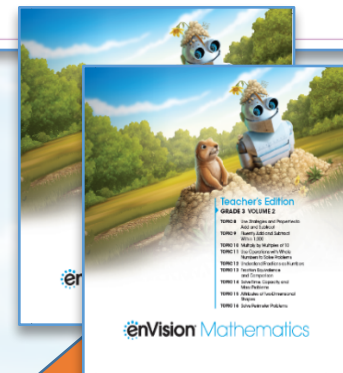
Relate Multiplication and Addition

Materials
Two-color counters (or Teaching Tool 9)

- Have students use counters to show 4 groups of 3. Draw the groups on the board.
- Write how many counters are in each group. Ask a volunteer to write an addition equation to find the total number of counters.
- Have another student write a multiplication equation to find the total number of counters and then explain what the factors and product mean.

$$3 + 3 + 3 + 3 = 12$$

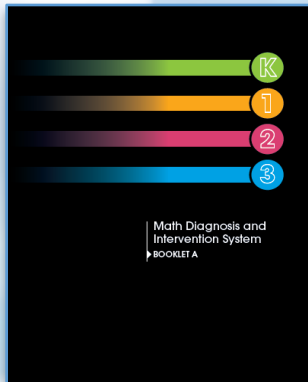
$$4 \times 3 = 12$$



Teacher's Edition
Lead struggling students through the Intervention Activity while other students work on Additional Practice or at centers or stations.

Teacher's Resource Masters

Teacher-led Small Groups



Math Diagnosis and
Intervention System
(MDIS)



*Language Support
Handbook*

Consider using strategies, activities, and routines from the *Language Support Handbook* to support students' language development in small groups.

Use MDIS intervention lessons to provide targeted intervention to individual students or small groups. Find MDIS lesson recommendations in your Teacher's Edition.



Technology Center



When students take the Quick Check online, their responses are automatically scored and the system can assign differentiated resources based on each student's results.

- Assign students differentiated digital practice to work on while you pull small groups, such as:
- Adaptive Practice powered by Knewton (Grades 3–5), and/or
 - Practice Buddy with built-in learning aids for support.

All students can benefit from the Math Tools and Math Games that reinforce concepts, critical thinking, and application skills. Check out the Teacher's Edition for recommendations of digital resources that are aligned to the topic or lesson.



**Visual Learning
Animation Plus**

Assign some students the Visual Learning Animation Plus to watch on an electronic device.

Activity Centers

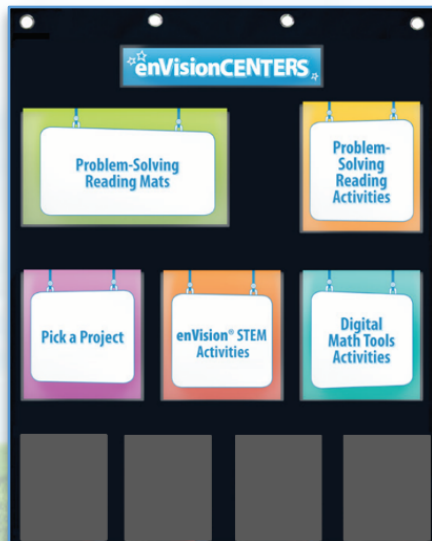
During Step 3 of each lesson, have students work on their Pick a Projects, Problem-Solving Leveled Reading Mats, or **enVision** STEM Projects while you work with small groups.

Have students work on Problem-Solving Leveled Reading Mats to apply their math understanding in a real-world context.

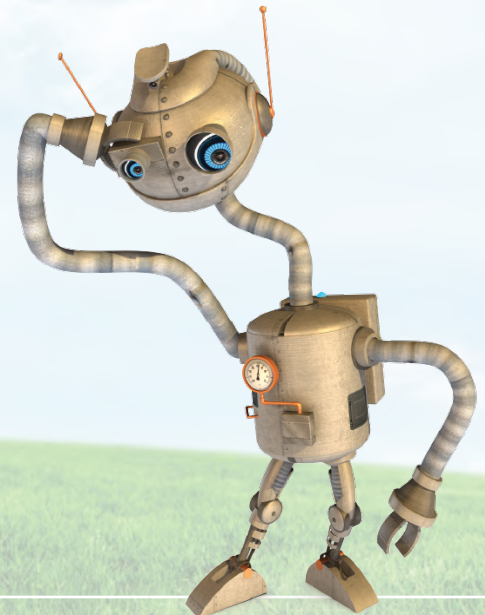


The side with an orange circle has on-level text, and the side with a purple circle has below-level text.

Problem-Solving
Leveled Reading Mats



Keep your Problem-Solving Leveled Reading Mats, supplies, and/or manipulatives in the pocket chart so students can quickly and easily find materials.




Activity Centers

PROJECT 4A

Where can you bike near home?


Project: Make a Bike Trail Brochure



PROJECT 4B

What kinds of coral grow in Florida?


Project: Build a Coral Model



PROJECT 4C

What do you collect?


Project: Display a Rock and Leaf Collection



PROJECT 4D

How much does it cost to visit the Kennedy Space Center?

Project: Make a Space Center Poster



Look at these plants and animals!

What plants and animals live in your area?

Wow! Let's do this project and learn more.



enVision STEM Project: Plants, Animals, and Arrays

Find Out Make lists of different types of plants and wild animals that you see. Look in your neighborhood or in a nearby park. Look at how the animals and plants come together.

Journal: Make a Book Show what you find out in a book. In your book, also:

- Tell about plants or animals that you see in groups. Look for patterns.
- Make an array of a group of plants and an array of a group of animals.

MAP.2.OA.1.1, 2.OA.2.2, 2.OA.3.3, 2.OA.3.4, MAP.2.5.1, MP.1.1, MP.2.1, MP.3.1, MP.4.1, MP.5.1, MP.6.1, MP.7.1, MP.8.1



In the **enVision STEM** activity, students make connections across topics and content areas, applying math to real-world situations.

At the start of a topic, students can differentiate for themselves by choosing a Pick a Project; they have a chance to apply math concepts to a context and in a modality that interest them.

Independent Practice Resources

Interactive Practice Buddy and Another Look Video are at PearsonRealize.com.

ADDITIONAL PRACTICE

LEVELED ASSIGNMENT **I** ITEMS 1–3, 7–8, 12, 14–15 **O** ITEMS 4–5, 9–10, 12–15 **A** ITEMS 3, 6, 9, 11–15

Another Look!

Each group below has the same number of squares. There are 5 groups of 4 squares.

Responses

4 + 4 + 4 + 4 + 4 = 20
5 × 4 = 20

Complete 1 and 2. Use the pictures to help.

1. 4 groups of 3.
4 × 4 = 16
4 × 3 = 12

2. 3 groups of 4.
3 × 4 = 12
3 × 3 = 9

In 3 and 4, write the addition equation as a multiplication equation.

3. 3 + 3 + 3 + 3 + 3 = 15
5 × 3 = 15

4. 7 + 7 + 7 = 21
3 × 7 = 21

In 5–8, write the multiplication equation as an addition equation.

5. 5 × 5 = 25
5 + 5 + 5 + 5 + 5 = 25

6. 6 × 2 = 12
2 + 2 + 2 + 2 + 2 + 2 = 12

7. 3 × 4 = 12
3 + 3 + 3 = 9

8. 6 × 6 = 36
6 + 6 + 6 + 6 + 6 + 6 = 36

Another Look!

Each group below has the same number of squares. There are 5 groups of 4 squares.

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7. 3 × 4 = 12
3 + 3 + 3 = 9

8. 6 × 6 = 36
6 + 6 + 6 + 6 + 6 + 6 = 36

Available Online

Use the Leveled Assignment guide in the Additional Practice section of the TE Step 3 page to choose differentiated practice for students to work on in the *Additional Practice Workbook*.



Additional Practice is available online too!



Additional Practice Workbook

You can assign *Additional Practice Workbook* pages as homework or classwork while you facilitate small group instruction.

Independent Practice Resources

Daily Review and Today's Challenge might make good independent practice options for your students too!



Assign the **enVision** STEM extension, Pick a Project extension, or 3-Act Math Sequel to students who are ready for a challenge.

Fluency Review Activity

Work with a partner. Point to a clue. Read the clue. Look below the clues to find a match. Write the clue letter in the box next to the match. Find a match for every clue.

Clues

| | | |
|------------------------|------------------------|------------------------|
| A Is equal to $9 + 11$ | E Is equal to $19 - 9$ | I Is equal to $2 - 2$ |
| B Is equal to $13 - 6$ | F Is equal to $9 + 6$ | J Is equal to $9 + 10$ |
| C Is equal to $8 + 8$ | G Is equal to $10 - 7$ | K Is equal to $16 - 8$ |
| D Is equal to $12 - 8$ | H Is equal to $8 + 9$ | L Is equal to $6 + 7$ |

Topic 1 | Fluency Review Activity

Don't forget about the end-of-topic resources like Vocabulary Review and Fluency Practice as independent practice options.

Vocabulary Review

Understand Vocabulary

Choose the best term from the Word List. Write it on the blank.

- _____ is an operation you can use to join.
- You solve an equation by finding the value that is _____.
- You can use (s) _____ to display objects in rows and columns.
- A line marked in equal units and numbered in order is called (s) _____.

For each of these terms, give an example and a non-example.

| | Example | Non-example |
|---|---------|-------------|
| 5. Division | _____ | _____ |
| 6. Equation | _____ | _____ |
| 7. Commutative Property of Multiplication | _____ | _____ |

Use Vocabulary in Writing

8. Explain how you can multiply 3×4 . Use at least 2 terms from the Word List in your explanation.

Word List

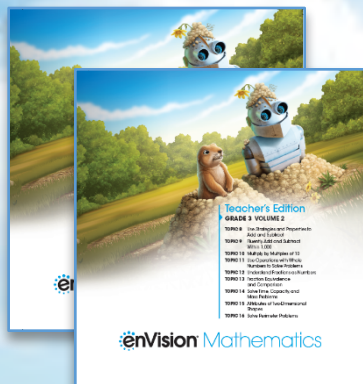
- array
- column
- Commutative Property of Multiplication
- division
- equal groups
- equation
- factors
- multiplication
- number line
- product
- row
- unknown

Topic 1 | Vocabulary Review

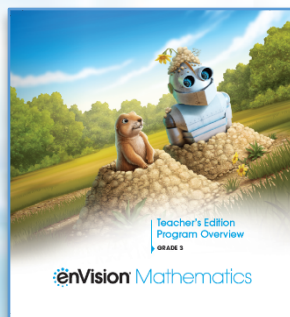
enVision[®] Mathematics

SAVVAS
LEARNING COMPANY


Thank You!



Teacher's Edition



Teacher's Edition
Program Overview

A cartoon robot character with large, expressive eyes and a friendly smile is flying a small propeller airplane. The robot is wearing a white flight suit and has its arms outstretched as if holding the controls. The airplane is white with a propeller on the front. The background is a bright blue sky with fluffy white clouds.

See your Teacher's Edition
and Teacher's Edition
Program Overview for
additional tips!