



Tutorial Guide: Teaching a Lesson

Program Description

enVisionMATH is a math program that balances skill instruction with instruction that develops conceptual understanding through problem-based interactive learning and visual learning.

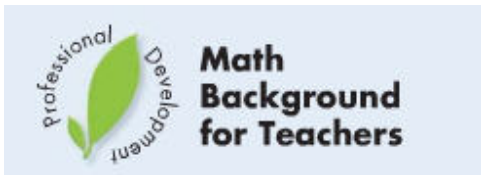
Helpful Materials



The materials that are referred to in this tutorial are:

- Topic Teacher’s Edition (any grade, any topic)
- Topic Pouch (any grade, any topic)

Lesson Preparation



The enVisionMATH lessons are tailored to address all of the TEKS.

Every lesson page provides information to help you during the planning of your lessons.

The TEKS Standard is provided underneath the lesson number in the upper left corner.

The green leaf in the left column identifies the Professional Development corner. This section cites important math background and often key research findings.

Quick and Easy Lesson Overview

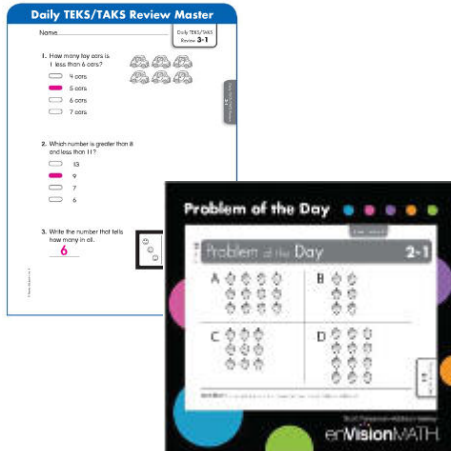
Objective	Essential Understanding	Vocabulary	Materials
Students read and write numbers in the hundreds.	Our number system is based on groups of ten. Whenever we get ten in one place value, we move to the next greater place value.	digits (p. 4) place value (p. 4) standard form (p. 5) expanded form (p. 5) word form (p. 5)	Place-value blocks (or Teaching Tool 2.4) Interactive Learning Recording Sheet 1

On that same page, look for the Quick and Easy Lesson Overview. This Lesson Overview identifies the lesson objectives which lists the skills students should be able to do at the end of the lesson. The essential understandings are what students should at the end of the lesson. The overview also calls out the important math vocabulary and the materials you will need during the lesson.

The Instructional Plan

- Part 1: Daily TEKS/TAKS Review and Problem of the Day
- Part 2: Develop the Concept: Interactive
- Part 3: Develop the Concept: Visual
- Part 4: Close/ Assess / Differentiate

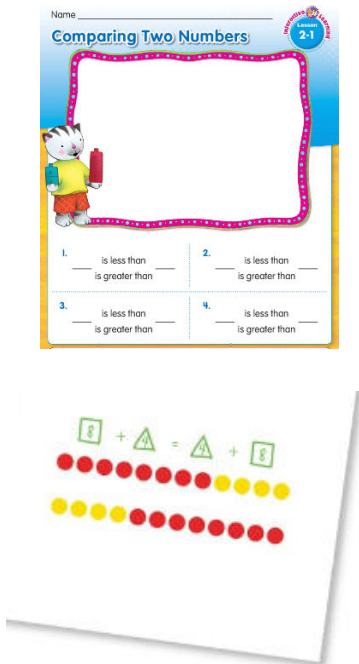
Part 1 - Daily Spiral Review



- The Daily TEKS/TAKS Review reviews foundational math skills and concepts. Students are provided with this master in their Daily TEKS/TAKS Review Workbook.
- The Problem of the Day provides ongoing practice solving a variety of problem types. These problems also review foundational math skills. The Teacher's Edition provides tips for reinforcing good problem solving strategies, and there is also a teaching guide, which highlights before, during and after teaching actions as noted in Randy Charles's landmark *Problem-Solving Experiences* book.

Part 1 will take between 5 to 10 minutes to complete and can be done at any time during the instructional day.

Part 2 - Develop the Concept: Interactive



The interactive learning portion of the lesson helps students develop an understanding of the math and begins to develop the new math concept. These are problem-based activities to provide another daily problem solving opportunity.

The interactive activity has a four-part teaching approach:

- Teacher sets the purpose and poses the problem
- Students solve the problem often working with a partner, in a small group or independently to solve the problem by talking, drawing and sometimes using manipulatives
- Students share their thinking and work
- Teacher models how to solve the problem

Primary students record their work for this part of the lesson on the first page of their lesson page. Intermediate grades will have an interactive recording sheet in the topic pouch or will use a white sheet of paper to solve the problem.

The interactive learning activity should take about 10 to 15 minutes to complete; Kindergarten will take about 30 minutes.

Part 3 - Develop the Concept: Visual



The purpose of this part of the lesson is to further develop the math concept and provide a bridge from the interactive learning to the lesson exercises. The Visual Learning Bridges and Visual Learning Animations are carefully sequenced pictures or animations that provide stepped-out instruction to enhance students' understanding. The key vocabulary is highlighted in yellow. These words are linked to the Animated Glossary in the Visual Learning Animations.

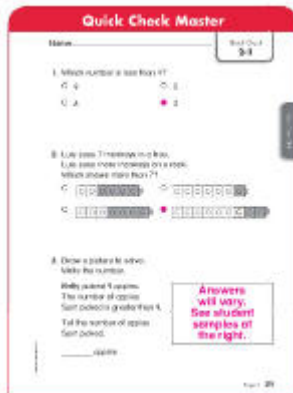
The Teacher's Edition provides you with guiding questions in bright-blue text. There are also sections indicating Error Intervention and Preventing Misconceptions to insure complete understanding of the math concept.

This part of the lesson also includes Guided Practice, Independent Practice, and Problem Solving.

The Do You Understand? questions help students internalize the learning by asking them to explain the math process or concept. Intermediate grades also have Do You Know How? problems.

The Visual Learning portion should take between 30 to 45 minutes.

Part 4 - Close/Assess/Differentiate



The Quick Check assesses student understanding of the lesson and determines which leveled differentiated activity and leveled homework master to assign to each student.

The differentiated instruction activities are provided when you need to provide small group instruction to students who scored at the intervention (green) level based on the Quick Check assessment. Those students scoring On-Level or Advanced work independently on a center-based activity. The topic pouch provides the recording sheet for the center activities.

There is also a leveled homework sheet provided with additional practice problems. The three levels are determined by the Quick Check results. The Interactive Homework Workbook provides students with the On-Level practice master.