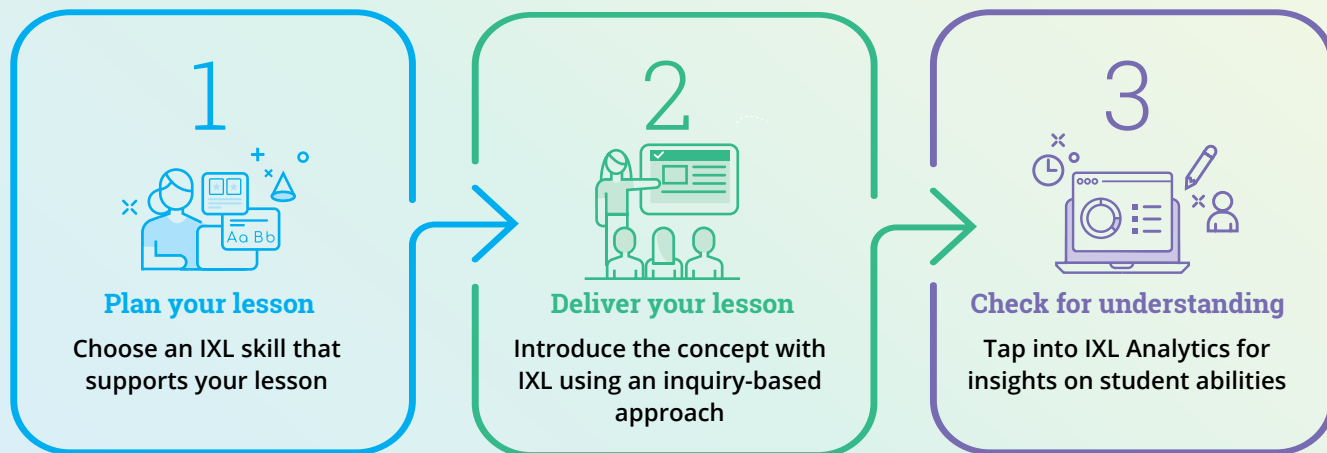


STEPS TO SUCCESSFUL IMPLEMENTATION

IXL is the perfect resource for modelling new concepts during whole class instruction.



LET'S LOOK AT AN EXAMPLE LESSON TOGETHER

Imagine: You are working with your class on classifying numbers as rational or irrational and will be using IXL to kick off the lesson.



1.

Plan your lesson

Choose an IXL skill that matches your objective

You can find skills by scanning the Grades page or by using your IXL skill plan. For this lesson, you might look at the category Numbers and choose the 1st skill, **Classify numbers**. Highlight your choice for your students by clicking on the star to the left of the skill name.

The screenshot shows the IXL Grade 9 math interface. The top navigation bar includes 'My IXL', 'Learning', 'Diagnostic', and 'Analytics'. Below this, there are tabs for 'Math', 'English', 'Recommendations', 'Skill plans', 'Provincial curriculum', and 'Assessments'. The main content area is titled 'Grade 9 math' and lists various skill categories with a star icon next to the first skill in each category. The categories and skills listed are:

- A. Numbers**
 - 1 Classify numbers (highlighted with a star)
 - 2 Compare rational numbers
 - 3 Rational numbers in order
 - 4 Negative exponents
 - 5 Convert between decimals and fractions
 - 6 Square roots of perfect squares
 - 7 Square roots of fractions and decimals
 - 8 Estimate square roots
- B. Operations**
 - 1 Add, subtract, multiply and divide integers
 - 2 Evaluate numerical expressions involving integers
 - 3 Evaluate variable expressions involving integers
 - 4 Add and subtract rational numbers
 - 5 Add and subtract rational numbers: word problems
 - 6 Multiply and divide rational numbers
 - 7 Multiply and divide rational numbers: word problems
 - 8 Evaluate numerical expressions involving rational numbers
 - 9 Evaluate variable expressions involving rational numbers
- I. Exponents**
 - 1 Understanding exponents
 - 2 Exponents with integer bases
 - 3 Exponents with decimal and fractional bases
 - 4 Negative exponents
 - 5 Multiplication with exponents - integral bases
 - 6 Division with exponents - integral bases
 - 7 Multiplication and division with exponents - integral bases
 - 8 Power rule - integral bases
 - 9 Multiplication with exponents - variable bases
 - 10 Division with exponents - variable bases
 - 11 Multiplication and division with exponents - variable bases
 - 12 Power rule - variable bases
 - 13 Evaluate expressions using properties of exponents
 - 14 Identify equivalent expressions involving exponents
- J. Scientific notation**
 - 1 Convert between standard and scientific notation
 - 2 Compare numbers written in scientific notation
 - 3 Multiply numbers written in scientific notation
- Q. Relations and functions**
 - 1 Relations: convert between tables, graph mappings and lists of points
 - 2 Identify independent and dependent variables
 - 3 Identify functions
 - 4 Identify functions: vertical line test
 - 5 Find values using function graphs
 - 6 Evaluate a function
 - 7 Evaluate a function: plug in an expression
 - 8 Complete a function table from a graph
 - 9 Complete a function table from an equation
 - 10 Interpret the graph of a function: word problems
- R. Direct variation**
 - 1 Identify proportional relationships
 - 2 Find the constant of variation
 - 3 Graph a proportional relationship
 - 4 Write direct variation equations
 - 5 Write and solve direct variation equations
- S. Linear functions**
 - 1 Identify linear functions

2.

Deliver your lesson

**Employ an inquiry-based approach**

Project your chosen IXL skill in your classroom and have students work together to answer the first question. Then, walk through the explanation as a class.

Note the key concepts in the Remember box, and talk through each step to solve the problem. Answer a few more questions as a class or in small groups.

Remember

Integers are positive whole numbers, their opposites, and zero: ..., -3, -2, -1, 0, 1, 2, 3, ...

Rational numbers can be written as $\frac{a}{b}$ (where a and b are integers and b is not zero). When written as decimals, rational numbers terminate or repeat.

Irrational numbers cannot be written as $\frac{a}{b}$ (where a and b are integers and b is not zero). When written as decimals, irrational numbers do not terminate or repeat.

Real numbers include all rational and irrational numbers.

Solve

Integers are counting numbers, their opposites, and 0. So, 10 is an integer.

10 can be written as $\frac{10}{1}$, which is a fraction. So, 10 is a rational number.

Since 10 is a rational number, it is not an irrational number.

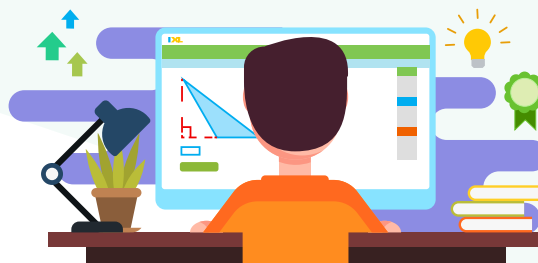
Since real numbers include rational numbers, 10 is also a real number.

There are three correct answer choices. 10 is an integer, a rational number, and a real number.

Get It

Cement learning with individual practice

Have students work on the skill individually, either in class or for homework. Set a SmartScore goal of 80 (proficiency), but encourage students to strive for 100 if they feel ready.



3. Check for understanding

Skill Analysis

Visit the Skill Analysis report to check for assignment completion and to gain insight on your students' understanding of the lesson. This report gives you overall stats on class performance and even groups your students by the level of difficulty they are working at within the skill.

Mouse over each student's name for deeper analysis of student progress. Keep an eye out for students who have a trouble spot and may need additional support or practice with foundational skills.

