

# THIRD GRADE

## MATH

Kindergarten through grade twelve math instruction emphasizes practices and activities that promote and integrate the eight Standards for Mathematical Practice and the Washington State Learning Standards.

### Mathematical Practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

### Instructional time should focus on these critical learning standards:

1. Represent and solve problems using addition, subtraction, multiplication, and division within 100.
2. Explain how multiplication and division are related.
3. Use arrays and area models to solve multiplication and addition problems.
4. Develop an understanding of fractions, especially unit fractions (fractions with numerator of 1)
5. Solve problems involving measurement, time, volume, and mass.

## SCIENCE

Kindergarten through grade twelve science instruction emphasizes practices and activities that promote and integrate the eight Science and Engineering Practices and the Next Generation Science Standards. At each grade level, students develop an understanding of the physical sciences, life science, and Earth and space sciences. There is additional emphasis in incorporating student inquiry and critical thinking with STEAM (Science, Technology, Engineering, Art, and Math).

### Science and Engineering Practices:

1. Asking Questions and Defining Problems
2. Developing and Using Models
3. Planning and Carrying Out Investigations
4. Analyzing and Interpreting Data
5. Using Mathematics and Computational Thinking
6. Constructing Explanations and Designing Solutions
7. Engaging in Argument from Evidence
8. Obtaining, Evaluating, and Communicating Information

### Instructional time is focused on these essential questions and terms:

1. How can we protect animals when their habitat changes? (predator, prey, shelter, criteria, constraints, nutrients, fossils, extinct, paleontologist, endangered species, camouflage, migration, lifecycle)
2. How can we predict patterns of motion? (force, motion, variable, charge, static electricity, magnetic force, magnetic pole, system)
3. How does climate influence scientists in determining the probability of extreme weather events and preparation for weather hazards? (weather, climate, forecast, atmosphere, air pressure, temperature, meteorologist, hazard, precipitation, environment, thermometer, barometer, wind vane, anemometer)