

ELEMENTARY SCHOOL

THIRD GRADE

SCOPE AND SEQUENCE

THIRD MATH

THIRD SCIENCE

Mathematics, Grade 3

First Six Weeks :: The student is expected to...

- use place value to read, write (in symbols and words), and describe the value of whole numbers through 999,999.[1.A]
- model addition and subtraction using pictures, words, and numbers.[3.A]
- select addition or subtraction and use the operation to solve problems involving whole numbers through 999. [3.B]
- round whole numbers to the nearest ten or hundred to approximate reasonable results in problem situations. [5.A]

Second Six Weeks :: The student is expected to...

- use place value to compare and order whole numbers through 9,999.[1.B]
- construct concrete models of fractions.[2.A]
- compare fractional parts of whole objects or sets of objects in a problem situation using concrete models.[2.B]
- use fraction names and symbols to describe fractional parts of whole objects or sets of objects.[2.C]
- construct concrete models of equivalent fractions for fractional parts of whole objects.[2.D]
- identify and extend whole-number and geometric patterns to make predictions and solve problems.[6.A]
- identify and describe patterns in a table of related number pairs based on a meaningful problem and extend the table.[7.B]
- locate and name points on a number line using whole numbers and fractions, including halves and fourths.[10.A]
- relate informal language to mathematical language and symbols.[15.B]

Third Six Weeks :: The student is expected to...

- determine the value of a collection of coins and bills.[1.C]
- identify, classify, and describe two- and three-dimensional geometric figures by their attributes. The student compares two- dimensional figures, three-dimensional figures, or both by their attributes using formal geometry vocabulary.[8.A]
- identify congruent two-dimensional figures.[9.A]
- create two-dimensional figures with lines of symmetry using concrete models and technology.[9.B]
- identify lines of symmetry in two dimensional geometric figures.[9.C]

Fourth Six Weeks :: The student is expected to...

- use linear measurement tools to estimate and measure lengths using standard units.[11.A]
- use standard units to find the perimeter of a shape.[11.B]
- use concrete and pictorial models of square units to determine the area of two dimensional surfaces.[11.C]
- identify concrete models that approximate standard units of weight/mass and use them to measure weight/mass.[11.D]
- identify concrete models that approximate standard units for capacity and use them to measure capacity.[11.E]
- use concrete models that approximate cubic units to determine the volume of a given container or other three-dimensional geometric figure.[11.F]
- use a thermometer to measure temperature; and.[12.A]
- tell and write time shown on analog and digital clocks.[12.B]

Fifth Six Weeks :: The student is expected to...

- use strategies including rounding and compatible numbers to estimate solutions to addition and subtraction problems.[5.B]
- generate a table of paired numbers based on a real-life situation such as insects and legs.[7.A]
- collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data.[13.A]
- interpret information from pictographs and bar graphs.[13.B]
- use data to describe events as more likely than, less likely than, or equally likely as.[13.C]
- identify the mathematics in everyday situations.[14.A]

Mathematics, Grade 3

- solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.[14.B]
- select or develop an appropriate problemsolving plan or strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and.[14.C]
- use tools such as real objects, manipulatives, and technology to solve problems.[14.D]
- explain and record observations using objects, words, pictures, numbers, and technology.[15.A]
- make generalizations from patterns or sets of examples and nonexamples.[16.A]
- justify why an answer is reasonable and explain the solution process.[16.B]

Sixth Six Weeks :: The student is expected to...

- learn and apply multiplication facts through 12 by 12 using concrete models and objects.[4.A]
- solve and record multiplication problems (up to two digits times one digit).[4.B]
- use models to solve division problems and use number sentences to record the solutions.[4.C]
- identify patterns in multiplication facts using concrete objects, pictorial models, or technology.[6.B]
- identify patterns in related multiplication and division sentences (fact families) such as $2 \times 3 = 6$, $3 \times 2 = 6$, $6 \div 2 = 3$, $6 \div 3 = 2$.[6.C]

Science, Grade 3

First Six Weeks :: The student is expected to...

- demonstrate safe practices during field and laboratory investigations.[1.A]
- make wise choices in the use and conservation of resources and the disposal or recycling of materials.[1.B]
- plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology.[2.A]
- collect information by observing and measuring.[2.B]
- analyze and interpret information to construct reasonable explanations from direct and indirect evidence.[2.C]
- communicate valid conclusions.[2.D]
- construct simple graphs, tables, maps, and charts to organize, examine and evaluate information.[2.E]
- analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information.[3.A]
- draw inferences based on information related to promotional materials for products and services.[3.B]
- demonstrate that repeated investigations may increase the reliability of results.[4.B]
- observe and identify simple systems such as a sprouted seed and a wooden toy car.[5.A]

Second Six Weeks :: The student is expected to...

- observe and identify organisms with similar needs that compete with one another for resources such as oxygen, water, food, or space.[8.B]
- describe environmental changes in which some organisms would thrive, become ill, or perish.[8.C]
- describe how living organisms modify their physical environment to meet their needs such as beavers building a dam or humans building a home.[8.D]
- observe and identify characteristics among species that allow each to survive and reproduce.[9.A]
- identify some inherited traits of animals.[10.B]

Third Six Weeks :: The student is expected to...

- connect Grade 3 science concepts with the history of science and contributions of scientists.[3.E]
- observe and describe the habitats of organisms within an ecosystem.[8.A]

Fourth Six Weeks :: The student is expected to...

- represent the natural world using models and identify their limitations.[3.C]
- evaluate the impact of research on scientific thought, society, and the environment.[3.D]
- identify that the surface of the Earth can be changed by forces such as earthquakes and glaciers.[6.B]

Fifth Six Weeks :: The student is expected to...

- gather information including temperature, magnetism, hardness, and mass using appropriate tools to identify physical properties of matter.[7.A]
- identify matter as liquids, solids, and gases.[7.B]
- analyze how adaptive characteristics help individuals within a species to survive and reproduce.[9.B]
- identify some inherited traits of plants.[10.A]
- identify and describe the importance of earth materials including rocks, soil, water, and gases of the atmosphere in the local area and classify them as renewable, nonrenewable, or inexhaustible resources.[11.A]
- identify and record properties of soils such as color and texture, capacity to retain water, and ability to support the growth of plants.[11.B]

Science, Grade 3

Sixth Six Weeks :: The student is expected to...

- collect and analyze information using tools including calculators, microscopes, cameras, safety goggles, sound recorders, clocks, computers, thermometers, hand lenses, meter sticks, rulers, balances, magnets, and compasses.[4.A]
- observe and identify simple systems such as a sprouted seed and a wooden toy car.[5.A]
- observe a simple system and describe the role of various parts such as a yo-yo and string.[5.B]
- measure and record changes in the position and direction of the motion of an object to which a force such as a push or pull has been applied.[6.A]
- identify the planets in our solar system and their position in relation to the Sun.[11.C]
- describe the characteristics of the Sun.[11.D]