# Fourth Grade Science Curriculum Map

Note: The following timeline and sequence is meant to be a guide only and is subject to change.

Updated in the 2008-09 school year.



| Grade Level Content Expectations | 1st Trimester | | | | | | 2nd Trimester | | | | | | 3rd Trimester | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sept | | Oct | | Nov | | Dec | | Jan | | Feb | | Mar | | Apr | | May | |
| S.IP.04.11 Make purposeful observation of the natural world using the appropriate senses. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IP.04.12 Generate questions based on observations. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IP.04.13 Plan and conduct simple and fair investigations. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IP.04.14 Manipulate simple tools that aid observation and data collection (for example: hand lens, balance, ruler, meter stick, measuring cup, thermometer, spring scale, stop watch/timer, graduated cylinder/beaker). | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IP.04.15 Make accurate measurements with appropriate units (millimeters, centimeters, meters, milliliters, liters, Celsius, grams, seconds, minutes) for the measurement tool. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IP.04.16 Construct simple charts and graphs from data and observations. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IA.04.11 Summarize information from charts and graphs to answer scientific questions. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IA.04.12 Share ideas about science through purposeful conversation in collaborative groups. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IA.04.13 Communicate and present findings of observations and investigations. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IA.04.14 Develop research strategies and skills for information gathering and problem solving. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.IA.04.15 Compare and contrast sets of data from multiple trials of a science investigation to explain reasons for differences. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.RS.04.11 Demonstrate scientific concepts through various illustrations, performances, models, exhibits, and activities. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| S.RS.04.15 Use evidence when communicating scientific ideas. | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Resources: | | | | | | | | | | | | | | | | | | |
| L.OL.04.15 Determine that plants require air, water, light, and a source of energy and building material for growth and repair. | X | X | | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | |

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| L.OL.04.16 Determine that animals require air, water, and a source of energy and building material for growth and repair. | X | X | | | | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| L.EV.04.21 Identify individual differences (for example: color, leg length, size, wing size) in organisms of the same kind. | | | X | | | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| L.EV.04.22 Identify how variations in physical characteristics of individual organisms give them an advantage for survival and reproduction. | | | X | | | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| S.RS.04.18 Describe the effect humans and other organisms have on the balance of the natural world. | | | | X | | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| L.EC.04.11 Identify organisms as part of a food chain or food web. | | | | X | | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| L.EC.04.21 Explain how environmental changes can produce a change in the food web. | | | | X | | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.PM.04.23 Compare and contrast the states (solids, liquids, gases) of matter. | | | | | X | | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.PM.04.16 Measure the weight (spring scale) and mass (balances in grams or kilograms) of objects. | | | | | | X | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.PM.04.17 Measure volumes of liquids and capacities of containers in milliliters and liters. | | | | | | X | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.PM.04.18 Demonstrate the use of centimeter cubes poured into a container to estimate the container's capacity. | | | | | | X | | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.CM.04.11 Explain how matter can change from one state (liquid, solid, gas) to another by heating and cooling. | | | | | | | X | | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.PM.04.33 Demonstrate magnetic field by observing the patterns formed with iron filings using a variety of magnets. | | | | | | | | | X | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.PM.04.34 Demonstrate that non-magnetic objects are affected by the strength of the magnet and the distance away from the magnet. | | | | | | | | | X | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.EN.04.12 Identify heat and electricity as forms of energy. | | | | | | | | | | X | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.PM.04.53 Identify objects that are good conductors or poor conductors of heat and electricity. | | | | | | | | | | X | | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.EN.04.41 Demonstrate how temperature can be increased in a substance by adding energy. | | | | | | | | | | | X | | | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | | | |
| P.EN.04.42 Describe heat as the energy produced when substances burn, certain kinds of materials rub against each other, and when electricity flows through wire. | | | | | | | | | | | X | | | | | | | | | |

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| Resources: | | | | | | | | | | | | | | | | | | |
| P.EN.04.43 Describe how heat is produced through electricity, rubbing, and burning. | | | | | | | | | | | X | | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | |
| P.EN.04.51 Explain how electrical energy is transferred and changed through the use of a simple circuit. | | | | | | | | | | | | X | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | |
| P.EN.04.52 Create a simple working electromagnet and explain the conditions necessary to make the electromagnet. | | | | | | | | | | | | X | | | | | | |
| Resources: | | | | | | | | | | | | | | | | | | |

Fourth Grade Science Curriculum Map

Note: The following timeline and sequence is meant to be a guide only and is subject to change.

Updated in the 2008-09 school year.



| Grade Level Content Expectations | 1st Trimester | | | 2nd Trimester | | | 3rd Trimester | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | | | |
| E.ST.04.11 Identify common objects in the sky, such as the sun and the moon. | | | | | | | X | | | | | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.12 Compare and contrast the characteristics of the sun, moon and Earth, including relative distances and abilities to support life. | | | | | | | X | | | | | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.21 Describe the orbit of the Earth around the sun as it defines a year. | | | | | | | | X | | | | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.22 Explain that the spin of the Earth creates day and night. | | | | | | | | X | | | | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.23 Describe the motion of the moon around the Earth. | | | | | | | | | X | | | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.24 Explain how the visible shape of the moon follows a predictable cycle which takes approximately one month. | | | | | | | | | X | | | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.25 Describe the apparent movement of the sun and moon across the sky through day/night and the seasons. | | | | | | | | | | X | | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.31 Explain how fossils provide evidence of the history of the Earth. | | | | | | | | | | | X | |
| Resources: | | | | | | | | | | | | |
| E.ST.04.32 Compare and contrast life forms found in fossils and organisms that exist today. | | | | | | | | | | | | X |
| Resources: | | | | | | | | | | | | |
| S.RS.04.14 Use data/samples as evidence to separate fact from opinion. | | | | | | | | | | | | |
| Resources: | | | | | | | | | | | | |
| S.RS.04.16 Identify technology used in everyday life. | | | | | | | | | | | | |
| Resources: Waiting for Battle Creek Kit for specifics on this. | | | | | | | | | | | | |

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| S.RS.04.17 Identify current problems that may be solved through the use of technology. | | | | | | | | | | | | | | | | | | |
| Resources: Waiting for Battle Creek Kit for specifics on this. | | | | | | | | | | | | | | | | | | |
| S.RS.04.19 Describe how people have contributed to science throughout history and across cultures. | | | | | | | | | | | | | | | | | | |