

Science Grade 3

Adams County/Ohio Valley
Course of Study

Content Standard: Earth and Space
Benchmark C: Describe Earth's resources including rocks, soil, water, air, animals and plants and the ways in which they can be conserved.
Content Organizer: Earth Systems

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
1. Compare distinct properties of rocks (e.g., color, layering and texture).			

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Content Standard: Earth and Space
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Content Organizer: Earth Systems

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
2. Observe and investigate that rocks are often found in layers.			

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Content Standard: Earth and Space
Benchmark C: Describe Earth's resources including rocks, soil, water, air, animals and plants and the ways in which they can be conserved.
Content Organizer: : Earth Systems

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
3. Describe that smaller rocks come from the breakdown of larger rocks through the actions of plants and weather.			

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Content Organizer: Earth Systems

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
4. Observe and describe the composition of soil (e.g., small pieces of rock and decomposed pieces of plants and animals, and products of plants and animals).			

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Content Organizer: Earth Systems

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
5. Investigate the properties of soil (e.g., color, texture, capacity to retain water, ability to support plant growth).			

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Content Organizer: Earth Systems

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
6. Investigate that soils are often found in layers and can be different from place to place.			

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Content Standard: Life Sciences
Benchmark A: Differentiate between the life cycles of different plants and animals.
Content Organizer: Heredity

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
1. Compare the life cycles of different animals including birth to adulthood, reproduction and death (e.g., egg-tadpole-frog, egg-caterpillar-chrysalis-butterfly).			

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Content Standard: Life Science
Benchmark B: Analyze plant and animal structures and functions needed for survival and describe the flow of energy through a system that all organisms use to survive.
Content Organizer: Diversity and Interdependence of Life

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
2. Relate animal structures to their specific survival functions (e.g., obtaining food, escaping or hiding from enemies).			

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Content Standard: Life Science
Benchmark B: Analyze plant and animal structures and functions needed for survival and describe the flow of energy through a system that all organisms use to survive.
Content Organizer: : Diversity and Interdependence of Life

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
3. Classify animals according to their characteristics (e.g., body coverings and body structure).			

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Content Standard: Life Sciences
Benchmark C: Compare changes in an organism's ecosystem/habitat that affect its survival.
Content Organizer: : Diversity and Interdependence of Life

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
4. Use examples to explain that extinct organisms may resemble organisms that are alive today.			

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Content Standard: Life Sciences			
Benchmark C: Compare changes in an organism's ecosystem/habitat that affect its survival.			
Content Organizer: : Diversity and Interdependence of Life			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
5. Observe and explore how fossils provide evidence about animals that lived long ago and the nature of the environment at that time.			

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Content Standard: Life Sciences			
Benchmark C: Compare changes in an organism's ecosystem/habitat that affect its survival.			
Content Organizer: : Diversity and Interdependence of Life			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
6. Describe how changes in an organism's habitat are sometimes beneficial and sometimes harmful.			

Science Grade 3

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Course of Study

Content Standard: Physical Sciences
Benchmark C: Describe the forces that directly affect objects and their motion.
Content Organizer: : Forces and Motion

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
1. Describe an objects position by locating it relative to another object or the background.			

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Course of Study

Content Standard: Physical Sciences
Benchmark C: Describe the forces that directly affect objects and their motion.
Content Organizer: : Forces and Motion

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
2. Describe an objects motion by tracing and measuring its position over time.			

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Content Standard: Physical Science
Benchmark C: Describe the forces that directly affect objects and their motion.
Content Organizer: : Forces and Motion

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
3. Identify contact/noncontact forces that affect motion of an object (e.g., gravity, magnetism and collision).			

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Content Standard: Physical Science
Benchmark C: Describe the forces that directly affect objects and their motion.
Content Organizer: : Forces and Motion

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
4. Predict the changes when an object experiences a force (e.g., a push or pull, weight and friction).			

Science Grade 3

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Content Standard: Science and Technology			
Benchmark A: Describe how technology affects human life.			
Content Organizer: : Understanding Technology			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
1. Describe how technology can extend human abilities (e.g., to move things and to extend senses).			

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Content Standard: Science and Technology			
Benchmark A: Describe how technology affects human life.			
Content Organizer: : Understanding Technology			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
2. Describe ways that using technology can have helpful and/or harmful results.			

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Content Standard: Science and Technology			
Benchmark A: Describe how technology affects human life.			
Content Organizer: : Understanding Technology			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
3. Investigate ways that the results of technology may affect the individual, family and community.			

Science Grade 3

Adams County/Ohio Valley
Course of Study

Content Standard: Science and Technology
Benchmark B: Describe and illustrate the design process.
Content Organizer: : Abilities To Do Technological Design

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
4. Use a simple design process to solve a problem (e.g., identify a problem, identify possible solutions and design a solution).			

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Content Standard: Science and Technology			
Benchmark B: Describe and illustrate the design process.			
Content Organizer: : Abilities To Do Technological Design			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
5. Describe possible solutions to a design problem (e.g., how to hold down paper in the wind).			

Science Grade 3

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Content Standard: Scientific Inquiry
Benchmark A: Use appropriate instruments safely to observe, measure and collect data when conducting a scientific investigation.
Content Organizer: : Doing Scientific Inquiry

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
1. Select the appropriate tools and use relevant safety procedures to measure and record length and weight in metric and English units.			

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Content Standard: Scientific Inquiry
Benchmark B: Organize and evaluate observations, measurements and other data to formulate inferences and conclusions
Content Organizer: : Doing Scientific Inquiry

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
2. Discuss observations and measurements made by other people.			

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Content Standard: Scientific Inquiry
Benchmark B: Organize and evaluate observations, measurements and other data to formulate inferences and conclusions
Content Organizer: : Doing Scientific Inquiry

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
3. Read and interpret simple tables and graphs produced by self/others.			

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Content Standard: Scientific Inquiry
Benchmark C: Develop, design and safely conduct scientific investigations and communicate the results.
Content Organizer: : Doing Scientific Inquiry

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
4. Identify and apply science safety procedures.			

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Content Standard: Scientific Inquiry
Benchmark B: Organize and evaluate observations, measurements and other data to formulate inferences and conclusions
Content Organizer: : Doing Scientific Inquiry

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
5. Record and organize observations (e.g., journals, charts and tables).			

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Content Standard: Scientific Inquiry
Benchmark C: Develop, design and safely conduct scientific investigations and communicate the results.
Content Organizer: : Doing Scientific Inquiry

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
6. Communicate scientific findings to others through a variety of methods (e.g., pictures, written, oral and recorded observations).			

Science Grade 3

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Content Standard: Scientific Ways of Knowing
Benchmark B: Describe different types of investigations and use results and data from investigations to provide the evidence to support explanations and conclusions.
Content Organizer: : Nature of Science

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
1. Describe different kinds of investigations that scientists use depending on the questions they are trying to answer.			

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Content Standard: Scientific Ways of Knowing
Benchmark C: Explain the importance of keeping records of observations and investigations that are accurate and understandable.
Content Organizer: : Ethical Practices

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
2. Keep records of investigations and observations and do not change the records that are different from someone else's work.			

Science Grade 3

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Content Standard: Scientific Ways of Knowing
Benchmark D: Explain that men and women of diverse countries and cultures participate in careers in all fields of science.
Content Organizer: : Science and Society

Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
3. Explore through stories how men and women have contributed to the development of science.			

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Content Standard: Scientific Ways of Knowing			
Benchmark D: Explain that men and women of diverse countries and cultures participate in careers in all fields of science.			
Content Organizer: : Science and Society			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
4. Identify various careers in science.			

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Content Standard: Scientific Ways of Knowing			
Benchmark D: Explain that men and women of diverse countries and cultures participate in careers in all fields of science.			
Content Organizer: : Science and Society			
Grade-level Indicator	Instructional Activities/Strategies	Resources	Assessment
5. Discuss how both men and women find science rewarding as a career and in their everyday lives.			