



SCUBA Science

Ohio Academic Standards (Grades 3-8)

Below is a list of Ohio Science Academic Standards discussed during the teaching of **SCUBA Science**.

Physical Sciences

3-5 Benchmark C: Describe the forces that directly affect objects and their motion.

3.4 Predict the changes when an object experiences a force (e.g., a push or pull, weight, friction)

6-8 Benchmark B: In simple cases, describe the motion of objects and conceptually describe the effects of forces on an object.

8.3 Explain that an unbalanced force acting on an object changes that object's speed and/or direction.

Science and Technology

3-5 Benchmark A: Describe how technology affects human life.

3.1 Describe how technology can extend human abilities (e.g., to move things and to extend senses).

4.2 Investigate how technology and inventions change to meet people's needs and wants.

6-8 Benchmark A: Give examples of how technological advances, influenced by scientific knowledge, affect the quality of life.

6.1 Explain how technology influences the quality of life.

8.1 Examine how science and technology have advanced through the contributions of many different people, cultures and times in history.

Scientific Inquiry

3-5 Benchmark B: Organize and evaluate observations, measurements and other data to formulate inferences and conclusions.

3.2 Discuss observations and measurements made by other people.



- 5.2 Evaluate observations and measurements made by other people and identify reasons for any discrepancies.
 - 5.3 Use evidence and observations to explain and communicate the results of investigations.
- 3-5 Benchmark C: Develop, design and safely conduct scientific investigations and communicate the results.
- 3.6 Communicate scientific findings to others through a variety of methods (e.g., pictures, written, oral and recorded observations).
 - 4.3 Develop, design and conduct safe, simple investigations or experiments to answer questions.
 - 5.6 Explain why results of an experiment are sometimes different (e.g., because of unexpected differences in what is being investigated, unrealized difference in the methods used or in the circumstances in which the investigation was carried out, and because of errors in observations).

Scientific Ways of Knowing

3-5 Benchmark C: Explain the importance of keeping records of observations and investigations that are accurate and understandable.

6-8 Benchmark A: Use skills of scientific inquiry processes (e.g., hypothesis, record keeping, description and investigation).

- 6.1 Identify that hypotheses are valuable even when they are not supported.