

Is There Anybody Out There?

Grades 9-12

Taped program with interactive live component

OHIO Standards

Earth & Space Sciences (unless otherwise marked)

Rating Scale	Grade Level	Benchmark	Indicator
1 (main topic)	11	D	16. Describe advances in Earth and space science that have important long-lasting effects on science and society.
2 (covered in detail)	9	F	8. Use historical examples to explain how new ideas are limited by the context in which they are conceived; are often initially rejected by the scientific establishment; sometimes spring from unexpected findings; and usually grow slowly through contributing factors from many different investigators.
2 (covered in detail)	11	D	15. Use historical examples to explain how new ideas are limited by the context in which they are conceived; are often initially rejected by the scientific establishment; sometimes spring from unexpected findings; and usually grow slowly through contributing factors from many different investigators.
2 (covered in detail)	12	A	3. Explain how information about the universe is inferred by understanding that stars and other objects in space emit, reflect, or absorb electromagnetic radiation, which we then detect.

3 (briefly discussed)	8	B	6. Explain that interstellar distances are measured in light years.
3 (briefly discussed)	8	B	8. Name and describe tools used to study the universe.

6-8

Benchmark B. Explain that the universe is composed of vast amounts of matter, most of which is at incomprehensible distances and held together by gravitational force. Describe how the universe is studied by the use of equipment such as telescopes, probes, satellites, and spacecraft.

9-10

Benchmark F: Summarize the historical development of scientific theories and ideas, and describe emerging issues in the study of Earth and space sciences.

11-12

Benchmark A: Explain how technology can be used to gather evidence and increase our understanding of the universe.

Benchmark D: Summarize the historical development of scientific theories and ideas, and describe emerging issues in the study of Earth and space sciences.

MICHIGAN Standards

Standard V.4 Solar System, Galaxy, and Universe (ES)

Rating Scale	S.C.# (Strand)	S.C.# Grade Level	Indicator
1 (main topic)	4	High School	4. Explain how technology and scientific inquiry have helped us to learn about the universe.
2 (covered in detail)	IV.4	High School	3. Describe waves in terms of their properties.
3 (briefly discussed)	3	High School	3. Explain how stars and planetary systems form and how stars produce energy.

Standard component #2: All students will describe and explain how objects in our Solar System move.

Standard component #4: All students will explain how we learn about the universe.

IV. Using Physical Science Knowledge

4. Waves and Vibrations: All students will measure and describe vibrations and waves.

TOLEDO DIOCESE Guidelines

Earth & Space Sciences (unless otherwise marked)

Rating Scale	L.O.	Grade Level	Indicator
1 (main topic)	Unit III:D	H.S. Int. Science	Demonstrate an understanding of the different regions of the electromagnetic spectrum.
2 (covered in detail)			
3 (briefly discussed)	1	8	Examine the origin, evolution, composition, and relationship of celestial bodies.
3 (briefly discussed)	Unit II	H.S. Physics	Describe how astronomers use light years to measure distance.

Grade 8

Learning Objective 1: Understands the structure and composition of the universe and the Earth's place through a study of space exploration and the universe.

Unit III: Physical Science

D. Sound and Light - Science Concepts

Unit II: Relativity

Science and Technology