

# Dawn of Astronomy

## Grades 6-12

Taped program with interactive live component

---

### OHIO Standards

Earth & Space Sciences (unless otherwise marked)

Rating Scale	Grade Level	Benchmark	Indicator
1 (main topic)	8	A	1. Describe how objects in the Solar System are in regular and predictable motions that explain such phenomena as days, years, seasons, eclipses, tides, and Moon cycles.
2 (covered in detail)	5	A	1. Describe how night and day are caused by the Earth's rotation.
2 (covered in detail)	8	B	8. Name and describe tools used to study the universe.
2 (covered in detail)	11	B	2. Analyze how the regular and predictable motions of the Earth, Sun, and Moon explain phenomena on Earth.
3 (briefly discussed)	5	A	3. Describe the characteristics of the Earth and its orbit about the Sun (e.g. $\frac{3}{4}$ of Earth's surface is covered by water [some of it frozen] etc.).

### 3-5

**Benchmark A: Explain the characteristics, cycles, and patterns involving the Earth and its place in the Solar System.**

**6-8**

**Benchmark A:** Describe how the positions and motions of the objects in the universe cause predictable and cyclic events.

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

**11-12**

**Benchmark B:** Describe how the Earth is made up of a series of interconnected systems and how a change in one system affects other systems.

**MICHIGAN Standards**

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

Rating Scale	S.C.# (Strand)	S.C.# Grade Level	Indicator
1 (main topic)	2	Middle School	3. Describe and explain common observations of the night sky.
2 (covered in detail)	2	Middle School	2. Describe, compare, and explain the motions of Solar System objects. (Changes in length of day and height of Sun in sky.)
3 (briefly discussed)			

**Standard component #1:** All Students will compare and contrast our planet and Sun to other planets and star systems.

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

**TOLEDO DIOCESE Guidelines**

**Earth & Space Sciences (unless otherwise marked)**

<b>Rating Scale</b>	<b>L.O.</b>	<b>Grade Level</b>	<b>Indicator</b>
<b>1 (main topic)</b>	<b>Unit 1:B</b>	<b>H.S. Integrated Science</b>	<b>Research how different cultures have explained celestial motions and eclipses.</b>
<b>2 (covered in detail)</b>			
<b>3 (briefly discussed)</b>	<b>1</b>	<b>5</b>	<b>Investigate and observe constellations and explore legends associated with them.</b>

**Grade 5**

**Learning Objective 1: Understands the composition and structure of the universe, and the Earth's place in it.**