

Vermont
Middle School

Starry Night Lesson Plans
In order of relevance

Grades 5-6 Expectations

PHYSICAL SCIENCE

S5-6:22 Gravitational force

Gravity is the force that holds objects to the earth's surface, keeps planets, in orbit around the sun and governs the rest of the motion in the solar system.

The force of gravity pulls toward the center of mass of an object.

B1-B2 C2 D3 F3 G3

B1-B2 C2 D3

C2 F3 G3

UNIVERSE, EARTH, ENVIRONMENT

S5-6:44 Characteristics of the Solar System

The earth orbits the sun in a near circular path that takes a year to complete.

The moon's orbit around the earth once in about 28 days changes the portion of the moon visible to us, as a result of the sun's reflected light. (phases of the moon)

S5-6:45 Processes and Change over Time within Systems of the Universe

From earth the moon and the sun appear to be the same size, because the moon is so much closer to the earth than the sun.

Telescopes magnify the appearance of some very distant objects in the sky, including the moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than can be seen by the unaided eye.

A1-A5 B1-B2 C1-C4 D1-D3 I2

A2 B1 C1 C2 E3

A4 A3

All Starry Night lesson plans

A5 B2

C1 C3 C4 D1-D3
E1-E4 F1-F3 G1-G3 H1-H2 I1-I2

Vermont

Middle School (cont'd)

Grades 7-8 Expectations

PHYSICAL SCIENCE

S7-8:22 Gravitational Force

The force of gravity depends on the amount of mass objects have and how far apart they may be.

The force of gravity is hard to detect unless at least one of the objects has considerable mass.

Starry Night Lesson Plans In order of relevance

C2	B1	D3	F3	G3	I2
----	----	----	----	----	----

C2	B1	D3	F3	G3	I2
----	----	----	----	----	----

C2	B1	D3	F3	G3	I2
----	----	----	----	----	----

UNIVERSE, EARTH, ENVIRONMENT

S7-8:45 Processes and Change over Time within Systems of the Universe

The sun is many thousands of times closer to the earth than any other star. The sun is located near the edge of a disc-shaped galaxy of stars.

All Starry Night lesson plans

B2	G1-G3	H1-H2
----	-------	-------

S7-8:48 Processes and Change over Time within Earth Systems

Heat from the sun is the primary source of energy for changes on the earth's surface. The differences in heating of the earth's surface produce the planet's weather patterns.

A2	F1	F2
----	----	----

A2	F1	F2
----	----	----

Seasons result from variations in the amount of sun's energy hitting the earth's surface. This happens because of the tilt of the earth's axis and the orbit of the earth around the sun.

A2
