

Lesson 1: Oksana, Issa, and Layla

The Sun and Moon can be visible during the daytime and the Moon and stars can be visible at night.

Students analyze and interpret observations to identify patterns of the Sun, Moon, and stars in the sky.

Lesson 2: Too Dark to See

We see objects when light shines on them.

Students carry out an investigation in order to explain that we see objects because light shines on them.

Lesson 3: Locating the Light

We see objects when they give off their own light.

Students explain whether we see different objects because light shines on them or because they give off light.

Lesson 4: Mysterious Moon

We see the Moon because light shines on it.

Students compare two models of the Moon to decide which model better represents the observed patterns of the real Moon.

Lesson 5: Sunlight on the National Mall

The Sun appears to move across the sky in an arc pattern.

Students estimate the relative location of the Sun on 360-degree photos to develop a model of the Sun's daily pattern of motion.

Lesson 6: Moon Motion

The Moon appears to move across the sky in an arc pattern.

Students develop models of the Moon and Sun's daily pattern of motion.

Lesson 7: Dining in Daylight or Darkness

Data can be represented by symbols in an investigation.

Students plan an investigation, including how to model daylight and night on a data table, to determine the pattern of daylight throughout the year.

Lesson 8: Pattern of Daylight

There is more daylight in the summer and less daylight in the winter.

Students carry out an investigation to identify the pattern of the most daylight in the summer and the least daylight in the winter.

Science Challenge

Lesson 9: Oksana's Walk to School Part 1

At certain times of the year, it can be dark when kids arrive at or leave school.

Students develop and use a model of the Sun's daily pattern of motion to identify the times of the year that it will be dark when kids walk to and from school.

Lesson 10: Oksana's Walk to School Part 2

Objects that give off light can help kids see and be seen in the dark.

Students explain how different light sources cause objects to be seen.