

S.T.E.M. Activity Chapter 1

Name _____

In Our Corner of Space

Use with *ScienceFusion*
pages 410–413.

Develop Vocabulary

1. Write the definition using your own words.

solar system: A solar system is the name for the collection of the planets, and other bodies that revolve around a star. In our solar system, the sun is our star and there are eight planets, including Earth, that revolve around the sun.

planet: A planet is any large, round body that revolves around a star with a clear orbit.

Develop Concepts

2. Which characteristics do astronomers use to classify the different bodies found in the solar system?

Astronomers use size, shape, composition of the object, the type of orbit that it has, and its location in the solar system to classify a body found in the solar system.

3. Draw the sun and planets. Make sure that they are in their correct positions in relation to the sun.

Students' drawings should show each of the eight planets in the order of their position from the sun: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. The planets should resemble the art on the activity pages in their relative size.

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Do the Math!

4. Look at the table below that tells each planet's distance from the sun, and use it to answer the questions.

Earth	150 million km	Mars	228 million km
Jupiter	778 million km	Mercury	58 million km

5. How much farther from the sun is Mars than Earth?

Mars is 78 million km farther from the sun than Earth is.

6. How much farther from the sun is Jupiter than Mercury?

Jupiter is 720 million km farther from the sun than Mercury is.

7. List the planets in the table in order from the closest to the farthest from the sun. Which planet in the table is farthest from the sun?

Mercury, Earth, Mars, then Jupiter; Jupiter is the farthest planet from the sun.

8. Venus is 50 million km from Mercury. What is Venus's distance from the sun?

Venus is 108 million km from the sun.

Summarize

9. Create a two-column chart and compare the different characteristics of inner and outer planets.

Inner Planets	Outer Planets
revolve quickly and are closer to the sun	revolve slowly and are farther from the sun
have hard, rocky surfaces	have surfaces made of gas and ice
are warmer	are colder

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