



## Learning about the Solar System

CCSSR2: Determine **central ideas or themes** of a text and analyze their development; **summarize** the key supporting details and ideas.

When scientists looked at the stars long ago, they saw patterns. They did not understand everything about what they saw, so they kept looking in order to learn more. That is what scientists do. They ask questions and search for information to answer their questions. They are similar to explorers. While they do not travel far the way explorers do, they do make a kind of journey. Scientists want to learn more, so their journey is to travel from what they know to what they discover.

Scientists have learned several facts about our planet. They've discovered that it is very large and also incredibly diverse. There are both places that are extremely hot and spots that are freezing. There are mountains and plains, hills and valleys. There are deep oceans and there are great rivers and waterfalls. There are tropical rainforests and arid deserts. Those are all various components of our planet. Still, there is much more to learn about what is here on Earth. A scientist dedicates much time to learning. The scientist works hard to help us all become more knowledgeable about our world.

Our planet is in a galaxy called the Milky Way. The sun is a big star in our part of this giant galaxy, but our galaxy holds millions of other stars. The sun is very important to our planet because it provides light during the day, and gives us heat, too. Two other planets are closer to the sun than Earth: Mercury and Venus.

Scientists figured out how the Earth changes. Earth orbits the sun once each year, which means it travels once around the sun every 365 days. The other eight planets in our solar system also orbit around the sun. All travel in a pattern called an ellipse, which is a type of oval. Therefore, at times, Earth is farther from the sun. Scientists figured out that the farther Earth was from the sun, the cooler the planet was. They also figured out that it is the tilt of the Earth's axis, however, that has the greatest effect on temperatures.

Scientists are still learning about our galaxy. There will always be new things to discover. Today astronauts travel into space. They are explorers. While it is dangerous to travel in space, astronauts are dauntless and bravely travel thousands of miles just to learn.

**What is the main idea of this passage?**

**Underline four facts that support that main idea.**

### Extended Response

**On another page, write about this passage. What would you need to learn to become a scientist? Use information from the passage and your own ideas.**