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

Scientists have learned about our planet. It is very big. It is very diverse. There are places that are hot. There are places that are freezing. There are mountains and plains. There are hills and valleys. There are deep oceans. There are great rivers and waterfalls. There are rainforests. There are deserts. Those are all parts of our planet. There is much more to learn about what is here on Earth. A scientist dedicates much time to learning. The scientist works hard. Scientists are persistent. The scientist helps us all find out more 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. Our galaxy holds millions of other stars. The sun is very important to our planet. The sun gives us light during the day. It 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. 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 kind of oval. So at times Earth is farther from the sun. Scientists figured out that made it cooler on Earth then. But they also figured out that it is the tilt of the Earth’s axis that has the greatest effect on temperatures.

Scientists are still learning about our galaxy. There is much to discover. Today astronauts travel into space. They are explorers. It is dangerous to travel in space, but they are dauntless. They bravely travel thousands of miles to learn.
**Directions: Choose the best answer for each question**

1. What does *journey* mean in the passage?
   - a. trip
   - b. discover
   - c. science
   - d. learn

2. What does *diverse* mean in the passage?
   - a. big
   - b. changing
   - c. different
   - d. mysterious

3. What does *dedicates* mean in the passage?
   - a. helps
   - b. uses
   - c. learns
   - d. chooses

4. What does *dauntless* mean in the passage?
   - a. surprised
   - b. afraid
   - c. brave
   - d. scientific

5. Write your own answer to this question.

   What does *persistent* mean in the passage?

   ___________________________________________________________________
   ___________________________________________________________________

Questions developed for Chicago Public Schools by CUE, 2009.

**TEACHER NOTES: Develop Students’ Skills: Exercise Thinking**

These questions have not been validated, so decisions about student’s achievement should not be made based on their responses. They are intended to exercise skills. Recommended activities include: students work in pairs to choose the best response; give students the questions without the responses so they generate their own answers; students make up additional questions; students make up questions like these for another passage.

**Answers:** You can remove this answer key and then give it to students and ask them to figure out the basis for the correct response.

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Question 5 is open-ended. Here is a suggested response.

5. Keeps working, does not stop.
We were exhausted from all the work. There was always some work to do, so we slept in shifts. One of us had to be awake all the in case a problem occurred. Finally, we got to our destination. We had reached the space station, where we would do more work, but we would have less pressure. We had so much to do every day on our ship to reach the space station, now there were more people to help. We would be on a collaborative team. We would be able to share the work.

When we moved into the space station, I felt great. There was so much more space, we were not so crowded. We would have real beds to sleep in, and we would have better food. They had a garden on the space station. They grew vegetables.

The six astronauts on the space station were happy to see us. They said, “We have been waiting impatiently for you.” We were glad to see them, too. We had been worried because we heard that one of them had been sick.

We asked how she was feeling. She said she was better now, it had been a cold, but it is hard to have a cold in outer space. We were relieved and now could stop worrying.

That first night on the space station was great. We had good food, and we even had pizza for dinner. Then we were going to sleep. But one of the astronauts said, “We need to give you a job. Each person has to take turns staying awake. Here is the schedule.” Just when I thought things would be easy, I had a shift again.

I saw that I was first, so I would have to stay awake tonight. I was disappointed because I felt fatigued. I had been awake and working for 20 hours. But I knew it was my duty. So I sighed and said, “See you in the morning.”

I became an astronaut so that I could travel in space. Now I’m here. It is hard work. It’s even more challenging than I expected.
Directions: Choose the best answer for each question

6. What does relieved mean in the passage?
   a. worried
   b. tired
   c. glad
   d. sorry

7. What does shift mean in the passage?
   a. They were tired.
   b. They took turns.
   c. They had to work hard.
   d. They had to stay awake.

8. What does collaborative team mean?
   a. working together
   b. astronauts
   c. hard workers
   d. making a plan

9. What does fatigued mean?
   a. sad
   b. tired
   c. angry
   d. difficult

10. Write your own answer to this question.

    What does challenging mean in the last sentence?

    ____________________________________________________________
    ____________________________________________________________

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Answers: You can remove this answer key and then give it to students and ask them to figure out the basis for the correct response.

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Question 10 is open-ended. Here is a suggested response.

10. Difficult; a big job.