

**TRY THIS
AT HOME!**

**WHAT'S
WHAT** in the
solar system?
**TEST YOUR
KNOWLEDGE**

by matching the
clues with the planets of
the solar system.

**CHECK
IT OUT!**

FOR MORE SOLAR
SYSTEM FACTS, VISIT
EXPLORING THE
PLANETS
(GALLERY 207).

Mercury

Jupiter

Neptune

Mars

Venus

Uranus

Saturn

Earth

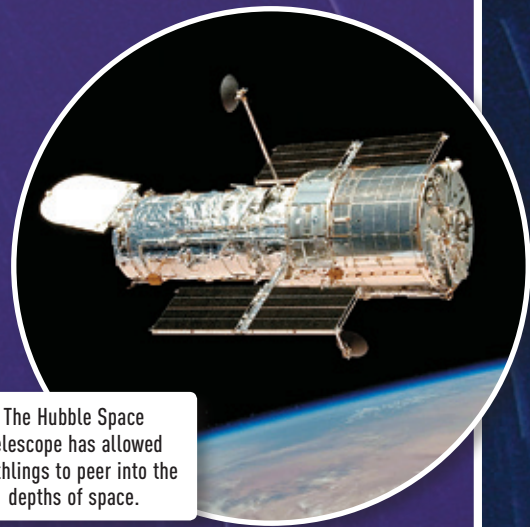
**CHECK
IT OUT!**

DO YOU EVER WONDER HOW BIG
THE SOLAR SYSTEM IS? TAKE A
WALK AND FIND OUT. ON THE MALL,
JUST OUTSIDE OF THE NATIONAL AIR
AND SPACE MUSEUM, IS A 1-TO-10
BILLION SCALE MODEL OF THE SOLAR
SYSTEM. EACH STEP YOU TAKE WILL
GIVE YOU AN IDEA OF JUST HOW BIG
OUR SOLAR SYSTEM
REALLY IS!

HOW WELL DO YOU KNOW YOUR SOLAR SYSTEM?

- 1** I am named for the Roman god of war, maybe because of my blood-red color. Compared to other planets, my climate is the most like that of Earth. If you ever come visit me bring a spacesuit since I don't have enough oxygen for you to breath.
- 2** I am the third largest gas giant, with strong winds and an unwelcoming atmosphere. I spin completely on my side, maybe because some giant space object knocked into me long, long ago. My tilt means my seasons last 20 years. That's a long summer vacation!
- 3** I am your closest neighbor, but I'm not the welcoming kind. If you visited, I would crush you with my heavy atmosphere and ruin your spacecraft within minutes with my intense heat. I am the hottest planet in the solar system thanks to my thick blanket of acidic clouds. So, just admire me in your night sky. You can't miss me. I'm the second brightest object up there (after the Moon!).
- 4** Take a look at me, the last gas giant. I awe onlookers with my beautiful blue hue. My color is the result of a layer of methane gas floating above my clouds. I have some of the fastest winds in the solar system.
- 5** I'm small, I'm fast, I'm number one! I'll race you around the sun and beat you every time. It takes you 365 days to make it all the way around; I can do it in only 88. My name is quite fitting—I was named after a Roman god known for his great speed.
- 6** I am the second largest planet out here. I have more than 50 moons, but I am most famous for the beautiful rings of ice and rocks that circle my equator. Some scientists think my rings are leftover pieces of moons that were destroyed by my powerful gravity.
- 7** I'm similar to my neighbor planets with hard and rocky surfaces. But I stay in the "Goldilocks Zone," the spot in the solar system where it's not too hot and not too cold. I'm just far enough from the blazing sun to support all kinds of life.
- 8** I am a gas giant and could fit all of the other planets inside me. I have quite a following of moons—more than 60 of them! You might recognize me by my large red spot, which is actually a storm three times the size of Earth. It has been raging for hundreds of years.

POSTCARDS FROM BEYOND VISIONS FROM THE HUBBLE SPACE TELESCOPE



The Hubble Space Telescope has allowed earthlings to peer into the depths of space.

Have you ever looked at the night sky through a telescope? For centuries, curious astronomers have used telescopes to gaze deeper and deeper into space. Telescopes have come a long way since the first telescopes of hundreds of years ago. People are always trying to make them better, so they can see farther into the universe.

On April 24, 1990, the most advanced and powerful telescope ever made to examine the universe from space—the **HUBBLE SPACE TELESCOPE**—was launched. The bus-sized telescope was carried in the cargo hold of the space shuttle *Discovery*. It was released into its orbit **353 MILES ABOVE EARTH'S SURFACE**. Traveling at a speed of 17,500 miles per hour, the telescope circles Earth every 97 minutes!

For more than 20 years, the Hubble Space Telescope has been busy taking images of planets in our solar system, never-before-seen stars, galaxies, and nebulae. Built with the most precise scientific instruments, it focuses its sight on **OBJECTS DEEP IN SPACE**. Its eight-foot-wide mirror collects more than 160,000 times the amount of light our eyes can ever detect, which enables it to image and electronically record galaxies **MILLIONS OF LIGHT-YEARS AWAY!**

Each week, the Hubble Space Telescope sends back **120 GIGABYTES OF DATA**. That's about the same amount of information contained in 41,000 digital photos, 527,000 books, or 12 million emails! This information is studied by astronomers all over the world. Images from Hubble have helped scientists understand more about how the universe formed, including how stars and galaxies form and function.

Be sure to check out the **HUBBLE TEST TELESCOPE** in *Space Race* (Gallery 114). Astronauts once practiced their repair tasks on this telescope here on Earth before heading up to fix the real thing. Also, check out the back-up Hubble mirror in *Explore the Universe* (Gallery 111).

**The Helix
Nebula**



DID YOU KNOW?

MANY PEOPLE THINK THIS DYING STAR, LOCATED IN THE CONSTELLATION AQUARIUS, LOOKS LIKE AN EYE. WHAT DO YOU THINK?

CHECK IT OUT!

MAKE YOUR OWN
HAND-HELD HUBBLE
TELESCOPE!

