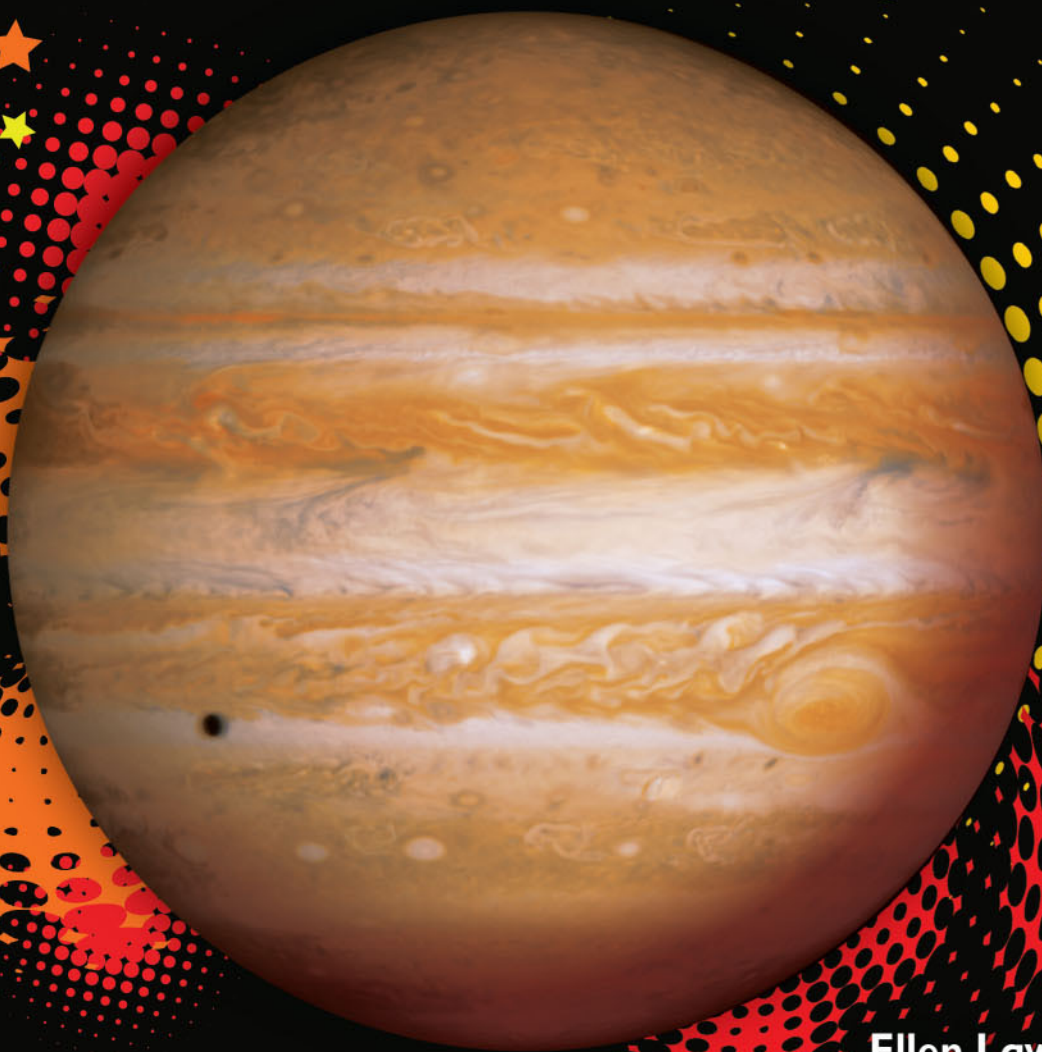




JUPITER

The Giant of the Solar System



Ellen Lawrence

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JUPITER

The Giant of the Solar System

by Ellen Lawrence

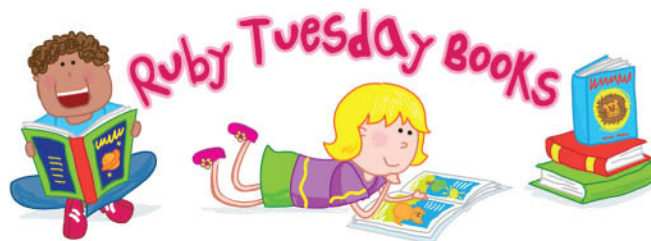
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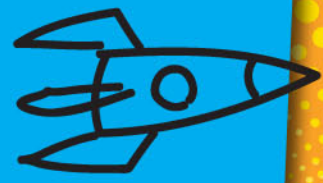
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Contents



Welcome to Jupiter 4

The Solar System..... 6

Jupiter’s Amazing Journey 8

A Closer Look at Jupiter..... 10

The Great Red Spot..... 12

Jupiter’s Family 14

Amazing Moons 16

Missions to Jupiter..... 18

Jupiter Fact File..... 20

Get Crafty: Melted Wax Crayon Jupiter22

Glossary23

Index24

Read More.....24

Learn More Online.....24

Words shown in **bold** in the text are explained in the glossary.



Welcome to Jupiter



Imagine flying to a world that is hundreds of millions of miles from Earth.

As your spacecraft gets close, you see colorful swirling clouds.

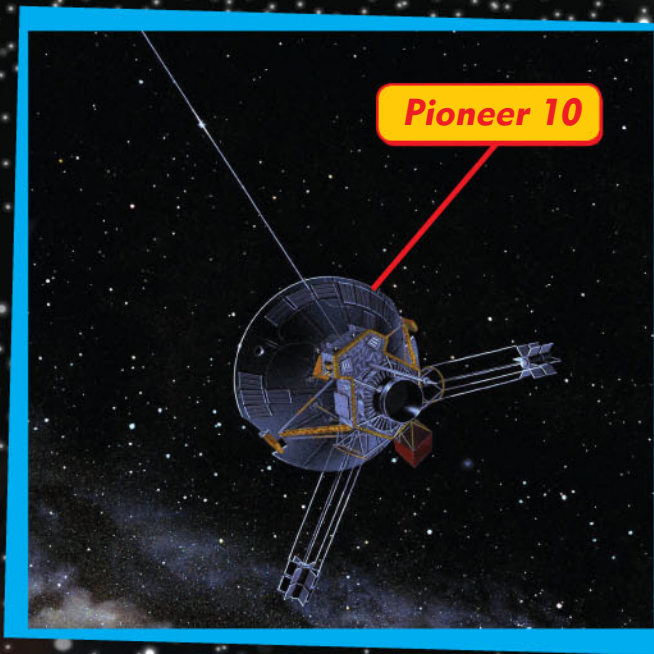
Inside the layer of clouds are strong winds and fierce storms that could destroy your spacecraft.

Even if you make it through the clouds, there is nowhere to land.

That's because this faraway world is a gigantic ball of **gases** and liquids.

Welcome to the **planet** Jupiter!

No humans have ever visited Jupiter, but spacecraft have. In 1972, a space **probe** called *Pioneer 10* was the first spacecraft to fly past the planet.



Pioneer 10

Pioneer 10 took hundreds of photos of Jupiter and beamed them back to Earth.

The clouds around Jupiter

The Solar System



Jupiter is moving through space at about 29,000 miles per hour (47,000 km/h).

It is moving in a huge circle around the Sun.

Jupiter is one of eight planets circling the Sun.

The planets are called Mercury, Venus, our home planet Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.

Icy **comets** and large rocks, called **asteroids**, are also moving around the Sun.

Together, the Sun, the planets, and other space objects are called the **solar system**.

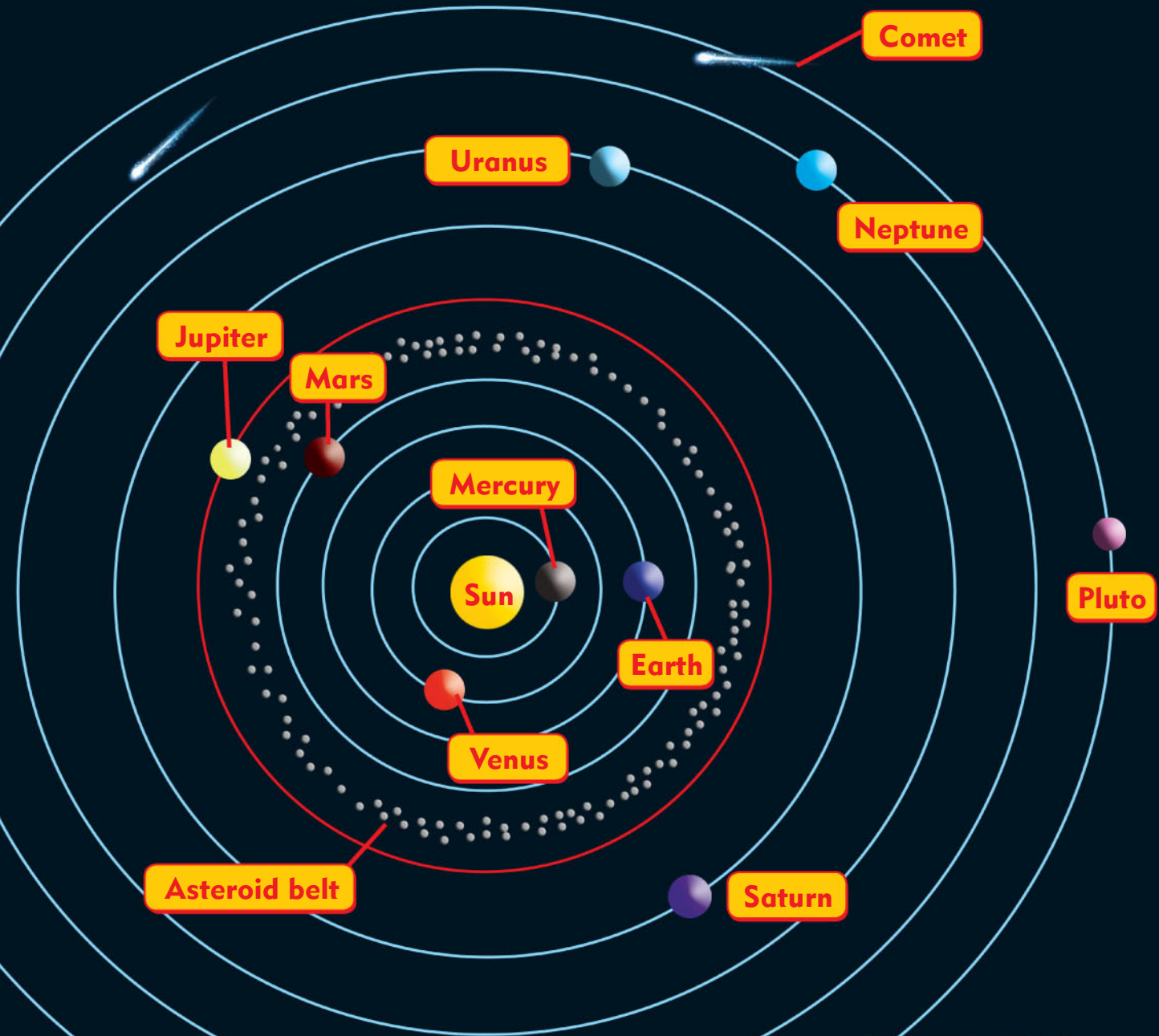
Most of the asteroids in the solar system are in a ring called the asteroid belt.



An asteroid

The Solar System

Jupiter is the fifth planet from the Sun.



The solar system is home to small planets, called **dwarf planets**. Pluto is a dwarf planet.

Index

A

asteroids 6–7, 9, 16
atmosphere 10, 19

C

Callisto 15, 16
clouds 4–5, 10, 13,
18–19
comets 6–7
craters 16

D

dwarf planets 7

E

Earth 4–5, 6–7, 8–9,
10–11, 12, 14, 18, 20
Europa 15, 16–17

G

Galileo 18–19
Ganymede 14–15
gases 4, 10, 13
Great Red Spot 12–13

I

Io 15, 16–17

J

Juno 18–19

M

moons 14–15, 16–17,
18, 21

P

Pioneer 10 4–5
planets 4, 6–7, 8–9,
10, 20

S

size of Jupiter 10–11,
14, 20
solar system 6–7, 10,
20
speed 6, 21
storms 4, 12–13
Sun, the 6–7, 8–9, 11,
20–21

T

temperatures 21

V

Voyager 1 13

Y

years 8, 21

Read More

Allyn, Daisy. *Jupiter: The Largest Planet (Our Solar System)*. New York: Gareth Stevens (2011).

Hughes, Catherine D. *First Big Book of Space (National Geographic Little Kids)*. Washington, D.C.: The National Geographic Society (2012).

Learn More Online

To learn more about Jupiter, go to
www.rubytuesdaybooks.com/jupiter

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JUPITER

The Giant of the Solar System

Hundreds of millions of miles from Earth, a giant, cloud-covered world circles the Sun. This planet is an enormous ball of gases and liquids, traveling through space with its family of over 60 moons.



Welcome to Jupiter!



Titles in this series

COMETS, METEORS, AND ASTEROIDS

Voyagers of the Solar System

EARTH

Our Home in the Solar System

JUPITER

The Giant of the Solar System

MARS

The Dusty Planet

MERCURY

The High-Speed Planet

THE MOON

Our Neighbor in Space

NEPTUNE

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PLUTO

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