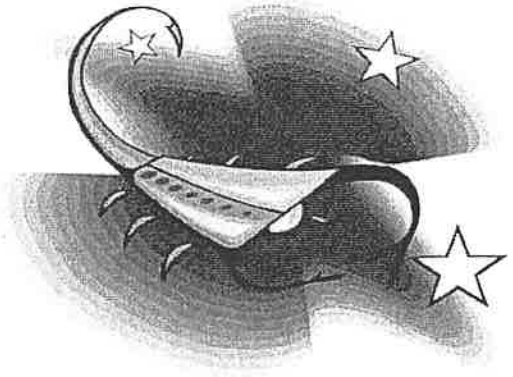


Name: _____

Pictures in the Stars

by Kelly Hashway

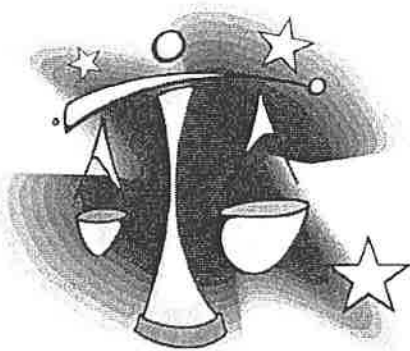


Have you ever stared at the clouds and tried to see pictures in them? Well, this is very similar to how ancient astronomers named the constellations.

Constellations are groups of stars, and today there are 88 officially recognized constellations. Each is named for a figure or object that astronomers saw when they viewed the star group. Most of the constellations are named after characters in mythology. Hercules, Draco, Orion, and The Great Bear are just a few. Others are named after the signs of the zodiac, like Sagittarius, Capricorn, and Scorpius. But the way they were named is very similar. Just like we look at clouds today and see figures and other objects, the astronomers looked at the stars and saw things.

But if you've ever played this cloud gazing game with your friends, you've probably noticed that different people see different things in the clouds. You may see a bear, while your best friend sees a lion in the very same cloud. This was also the case with naming the constellations. And as a result, the same constellation can be known by different names across the globe.

One of the best-known constellations is the Big Dipper. If you've ever seen it in the sky, then you know it looks like a scooper or a dipper. But the ancient Greeks called the Big Dipper "Ursa Major" or "Big Bear". The ancient Irish and French called the Big Dipper the "Chariot," and the British referred to it as the "Plough". So you can see how star gazing and studying the constellations to find shapes in the patterns can cause a single constellation to have multiple names.



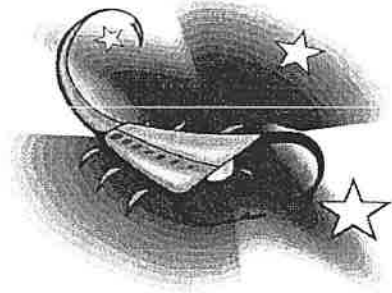
Another thing that contributes to these differing names is the expansion of the universe. The stars are moving and changing positions in the sky, which can make them look less like what they were originally named and more like something completely different. The constellation Cassiopeia originally looked like a W, but today it appears to be a squiggly line. Astronomers believe that the Big Dipper will look like a number five in 50,000 years.

Imagine what you will see the next time you look at the stars.

Name: _____

Pictures in the Stars

by Kelly Hashway



1. What is a constellation?
 - a. a group of stars that are close to Earth
 - b. a group of stars that is named after a zodiac symbol
 - c. a group of stars that was named for a figure or object that ancient astronomers saw
 - d. a group of stars shaped like an unusual animal
2. How many officially recognized constellations are there? _____
3. Long ago, the constellation Cassiopeia was shaped like a W. Today it is shaped like a squiggly line. Why does it look different today than it did many years ago?

4. Complete each sentence below.

The ancient Greeks thought the Big Dipper looked like a _____.

Long ago, people of Britain thought the Big Dipper looked like a _____.

Ancient Irish and French people thought the big dipper looked like a _____.

5. In the box, draw a picture of what the Big Dipper will probably look like in 50,000 years.

(note: The Big Dipper has seven stars.
Be sure there are 7 stars in your picture.)

Name: _____

Pictures in the Stars

Vocabulary Activity



The words below are scrambled words from the article.
Unscramble each word and write it on the line. Look
back in the article to be sure each word is spelled correctly.

1.

c	a	n	n
t	e	i	

Clue: from long ago

2.

n	m	i	i
a	g	e	

Clue: to form a picture in the mind

3.

a	c	r	h
t	o	i	

Clue: two-wheeled vehicle pulled by a horse

4.

n	m	t	e	s	s
r	r	o	o	a	

Clue: people who study stars and outer space

5.

a	o	s	x	i
n	n	e	p	

Clue: growth; getting bigger

6.

l	l	o	o	i	a	c
e	t	t	s	n	n	s

Clue: the 88 group of stars that makes an officially recognized shape

Name: _____

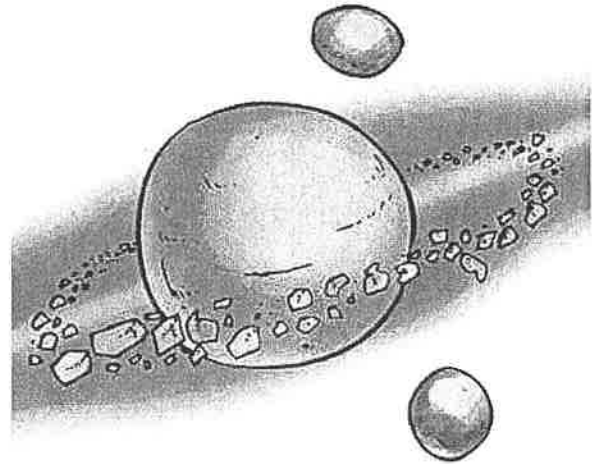
Moons in Orbit

by Katie Clark

Did you know that other planets have moons, too? These moons are called *satellites*. A satellite is something that *orbits*, or moves around a planet.

Some of these moons are small. Some of these moons are big. Some of them are really amazing!

Mars is our closest neighbor who has a moon—in fact, Mars has two of them! Mars' moons are named Phobos and Deimos. These moons are shaped like potatoes! Phobos gets closer to Mars each time it rotates around the planet. This means that one day it could crash into Mars!



Jupiter has over sixty moons. Ganymede is the largest out of any of the planets' moons. It is bigger than the planet Mercury! Another amazing moon is Io. It is full of volcanoes!

Saturn has big rings around it. These rings are made of moons that broke apart, and still orbit the planet. Saturn has fifty-three moons!

Uranus has a famous moon, too. Titania is known for earthquakes! Some of Titania's fault lines are a thousand miles long! All together Uranus has twenty-seven moons.

The planet Neptune was named after a god of the sea. Scientists named Neptune's moons after other sea gods! Triton was the first moon of Neptune that scientists found. It rotates in a different direction from the planet. Neptune has thirteen moons.

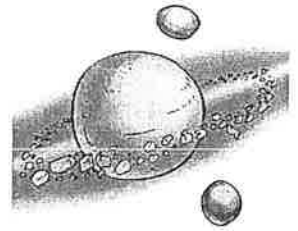
Mercury and Venus are the only two planets in our solar system that don't have moons. They are so close to the sun that any moons would be pulled away by the sun's gravity.

New moons, planets, and stars are discovered every day. Who will discover the next one? It might be you!

Name: _____

Moons in Orbit

by Katie Clark



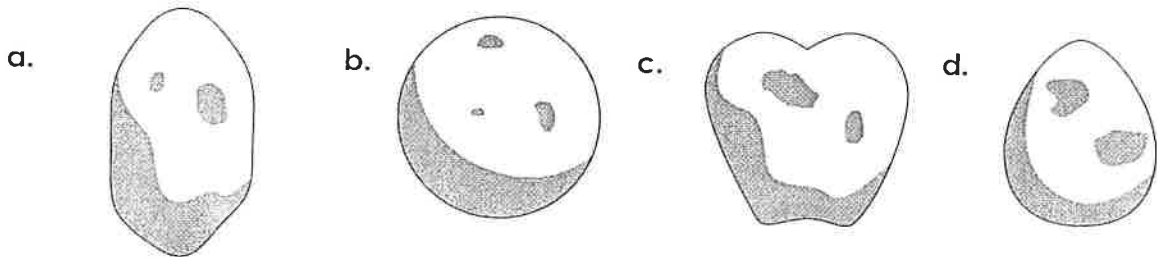
1. What is this article mostly about?
 - a. the solar system
 - b. Earth's moon
 - c. planets orbiting the sun
 - d. moons of different planets

2. Which is the largest moon in our solar system?
 - a. Jupiter
 - b. Saturn
 - c. Ganymede
 - d. Titania

3. Mars' moon Phobos may crash into Mars one day. Why?

4. Why don't Mercury and Venus have moons?

5. Look at the moons pictured below.



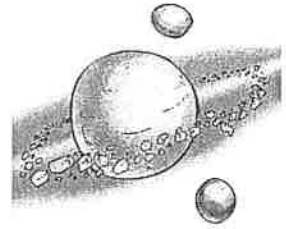
Which moon is Deimos? _____

Explain how you know. _____

Name: _____

Moons in Orbit

by Katie Clark



Match each of the the vocabulary words on the left with the correct definition on the right.

- | | |
|----------------------|---|
| _____ 1. satellite | a. ringed planet |
| _____ 2. Saturn | b. force that pulls objects toward the center of a star or planet |
| _____ 3. volcanoes | c. openings in a planet's surface or crust |
| _____ 4. earthquakes | d. vegetables that grow underground |
| _____ 5. rotates | e. events in which there is shaking and shifting of the ground |
| _____ 6. gravity | f. spins on an axis |
| _____ 7. famous | g. object which orbits a planet |
| _____ 8. potatoes | h. well-known |

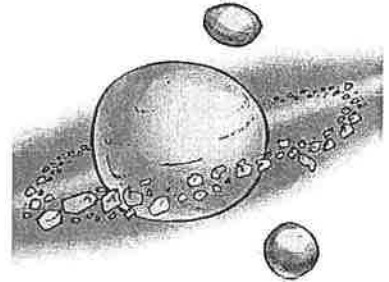
Now try this: Re-read the article and highlight each of the vocabulary words.

Name: _____

Moons in Orbit

by Katie Clark

Choose one moon in our solar system. Use the Internet or encyclopedia to research five interesting facts about the moon you chose.



Name of Moon: _____

Planet That It Orbits: _____

Fact 1: _____

Fact 2: _____

Fact 3: _____

Fact 4: _____

Fact 5: _____
