

JUST FOR U.S.*

GRADES 4-5

* Understanding Science

Volume 28 • Issue 3 2003 - 2004 Fernbank Science Center • DeKalb County School System ISSN 0742-6518



Ten times farther from the Sun than Earth,
Saturn orbits in freezing darkness.

**Saturn is famous for its rings.
Did you know they are made mainly of chunks of ice?
Here are more cool facts about Saturn!**

Saturn is almost a billion miles away.

Saturn takes almost 30 years to orbit the sun one time.



Most of Saturn is gas.

In a big enough bathtub, Saturn would float!

The Cassini spacecraft has been traveling to Saturn for seven years. It reaches Saturn in 2004.

**Saturn is also famous for its many moons.
It has more than 30! Here are a few of them.**



Titan (TIE tun) - The largest moon around Saturn, Titan is covered with orange smog. During the summer of 2004, the Huygens (HOY - genz) probe will drop through Titan's thick atmosphere and send information about it back to Earth.

Prometheus (pro MEE thee us) and Pandora (pan DOR uh) are shepherd moons. They keep particles in one of Saturn's rings in order, the same way shepherds herd sheep.

Iapetus (eye AP i tus) - This weird moon is bright on one side, and dusty dark on the other!



Mimas (MY muss) - It has one huge crater, left by a giant impact many years ago that may have almost smashed Mimas to pieces!

Enceladus (en SELL a duss) - The fresh surface ice reflects light better than any other object in the solar system!

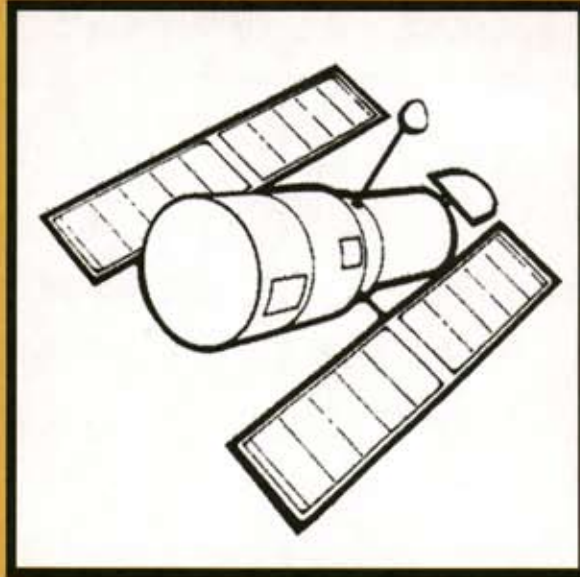


Moons are also called satellites.

Satellites are objects that revolve around a planet. Saturn's moons are satellites. The particles in Saturn's rings are satellites.

The spacecraft we send into orbit around Earth are also satellites.

Sometimes moons are called "natural satellites" and spacecraft are called "artificial satellites."



Earth's moon is our natural satellite, but we have thousands of artificial satellites!





Saturn Search

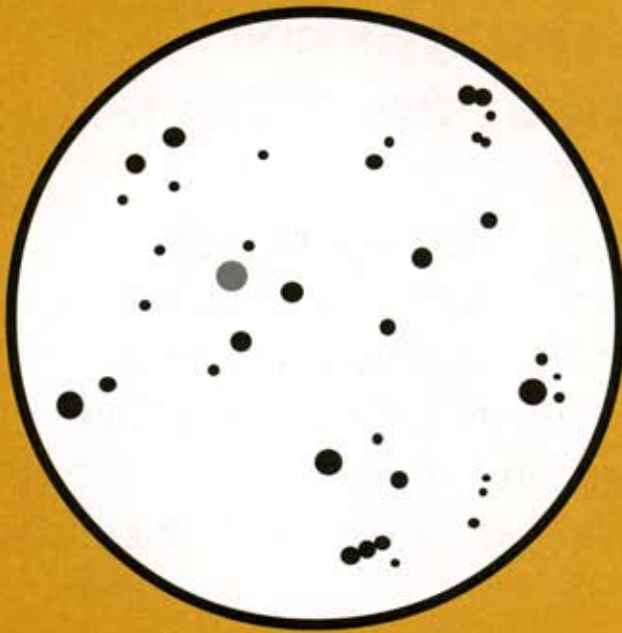
Find the Saturn words in the puzzle below.

D R E H P E H S T Q R M P D D
C J O U P G S A S I C I V L V
S A T U R N C T E O T M G K M
P R O M E T H E U S I A D W T
A G P G U R Q L D U N S N E B
M B Y A I V H L V L I H L I D
H U F N Q T U I P F S E A T T
H T G E U A L T L V S I S C X
C S X P L F L E I C A S J E U
Q B B I X A N N O A C P W Z V
F C D G S O D P A T N A I G P
M Z N J K G E U Y P N U Z X L
Z P A N D O R A S C E N F P C
M F E U M M I R X L R F T M S
Z G G H X S S U D A L E C N E

CASSINI
ENCELADUS
GIANT
HUYGENS
MIMAS

PANDORA
PROMETHEUS
RINGS
SATELLITE
SATURN

SHEPHERD
SIXTH
SMOG
TELESCOPE
TITAN



You can find Saturn through a telescope. The image on the left was taken first. A few months later, the image on the right was made. One dot moved during that time. It is Saturn. Can you find the Saturn dot?

Why did the dot move? During those few months, Earth moved part of the way along its orbit around the sun, so we see Saturn from a different angle. And Saturn moved along a small part of its orbit, too.

During the summer of 2004, the Cassini space craft arrives at Saturn. It will send back close-up pictures of Saturn's rings and moons.

Visit this website, <http://solarsystem.nasa.gov/missions/> to learn more about the Cassini mission to Saturn.

Under "All Current Missions," scroll down and choose Cassini.