

Crypto Quiz

Try to fill in the correct answer for each of the questions below. A letter should go on each blank line. The numbers underneath the lines match the entries in the secret message. What does it say?

The third planet from the Sun is named:

12 7 13 4 ____

Scientists think some channels on Mars were carved by:

23 7 4 12 13

Cooler regions on the Sun are called:

15 3 8 15 1 5 4 15

This planet has a moon named Triton:

8 12 1 4 3 8 12

Saturn was the first planet known to have:

13 ____ 8 ____ 15

Mars' smallest moon is named:

9 12 ____ ____ 5 15

This planet's largest crater is called Caloris Basin:

12 13 11 3 13 ____

The atmosphere of Uranus is mainly:

____ ____ 9 13 5 ____ 12 8 ____ 7 8 9 ____ 12 2 ____ 3 ____

Secret Message:

1 2 3 4 5 ____ 7 8 9 ____ 11 12 13 12 15 ____ 7 13 12

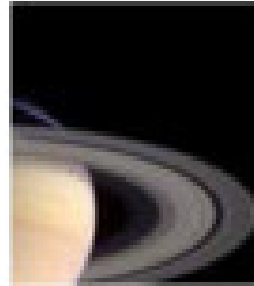
9 23 7 13 26 ____ 1 2 7 8 12 4 15

Photo Word Scramble

Each of the names of the pictures below have been scrambled. Can you unscramble the letters to find the correct names?



pteuirj



rn'si angrtssu



ompn solumsy



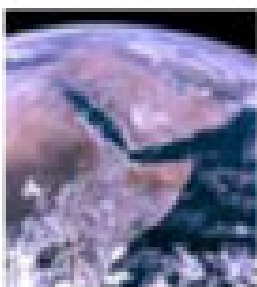
oarrau



unnpeet



nutsspos



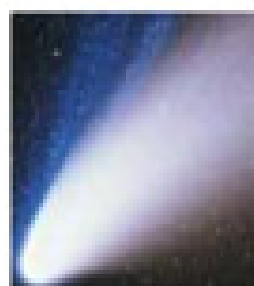
teehatr h



sdteairo



hntmoe o



oecmt

Word Find

Each of the words in the list to the right can be found along a row, column, or diagonal somewhere inside the box below. See if you can find them all.

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

VENUS
EARTH
MARS
CERES
ASTEROIDS
JUPITER
SATURN
NEPTUNE
URANUS
PLUTO
DWARF
PLANET
MOON

Cassini-Huygens

MISSION TO SATURN & TITAN

CASSINI WORD FIND

The words in the list below are hidden in the jumble of letters. Words may be frontwards, backwards, upside-down, or diagonal.

Cassini Words

ORBIT

METHANE

PROMETHEUS

SATURN

DIONE

TELESTO

ENCELADUS

PANDORA

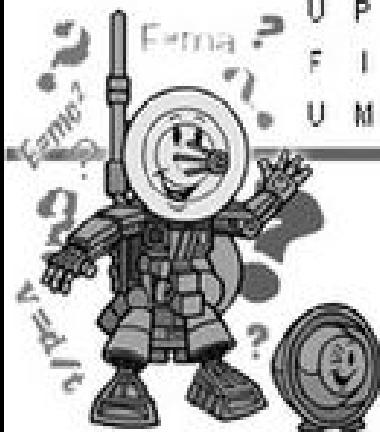
PAN

PARTICLE

EPIMETHEUS

CASSINI

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



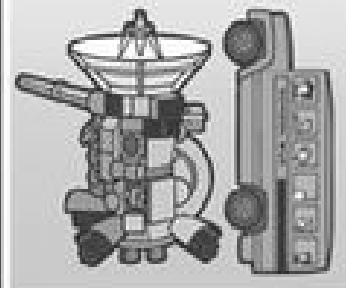
Scientists are particularly interested in Titan because it's one of the few known moons with its own dense atmosphere. Titan's atmosphere is also thought to be very similar to what Earth's atmosphere was a long time ago. By learning about Titan, we'll learn about our own planet.

Saturn is huge. It is the second largest planet in our Solar System. Only Jupiter is bigger. If you could line them up, more than nine Earths would fit across Saturn.

Its beautiful rings are not solid either. They are made up of particles of ice, dust and rock.

Some of these particles are as tiny as grains of sand, some are much larger than skyscrapers. Actually, some are up to a kilometer (more than half-a-mile) high across.

The rings are huge yet tiny: the main rings could cover almost the entire distance between Earth and the moon yet they are less than a kilometer (about half-a-mile) thick.

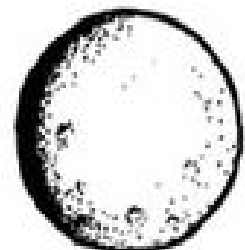


The Cassini spacecraft is about the same size as a 90-passenger school bus. It weighs roughly 5,650 kg (6 tons), more than half of which is rocket fuel.

Cassini has 12 high-tech instruments capable of 27 different science investigations. To operate them, the spacecraft has an elaborate electronic system that consists of more than 12 kilometers (almost 7.5 miles) of cabling, some 20,000 wire connections and 1,630 interconnect circuits.

In some ways, the spacecraft has senses better than our own. It can "see" in wavelengths of light and energy that the human eye cannot.

In addition, instruments onboard can "feel" things about magnetic fields and tiny dust particles that no human hand could detect.



IAPETUS

Iapetus' dark side is so dark that when Giovanni Cassini first saw it, he could only see the bright side of the moon.

Planet-Tac-Toe

Objectives:

1. Identify the planets and their relationship to the Sun
2. Comprehend and follow verbal directions
3. Reinforce correct usage of the comparative and superlative cases
4. Use technology to reinforce reading comprehension skills

Materials:

- paper for students to draw planet-tac-toe boards
- pencils
- pennies, poker chips, torn pieces of coloured paper, etc. to use as game markers

Procedure:

This activity is designed for use after students have become familiar with the names and characteristics of the eight planets in our solar system. Remind students that the "Did You Know?" and "The Facts" sections also contain important information. Once students are comfortable with their knowledge of the planets, they are ready to play Planet-Tac-Toe. Instruct students to draw a typical tic-tac-toe board. Each of the nine spaces should be filled in with the name of a different planet and the Sun. The arrangement of names is a student decision. The planet names can be written on the chalkboard for students to copy to insure correct spelling. The students will then cover the name of the solar system object that fits the teacher supplied description. The criterion for "winning" can be changed from game to game, for example, the first to cover three in a row vertically, horizontally or diagonally; the first to cover all planet names; the first to cover a plus sign.

Sample Teacher Clues:

1. This planet is the largest of all. (Jupiter)
2. This planet has more rings than all the others. (Saturn)

3. This planet has the fastest revolution around the Sun. (Mercury)
4. Some of the solar systems deepest valleys are found here. (Mars)
5. This is the hottest body in our solar system. (Sun)
6. Most of this planet is covered by water. (Earth)
7. This planet is closest to Earth. (Venus)
8. Only one planet is smaller than this one. (Mercury)
9. No other planet is hotter than this one. (Venus)
10. This planet has one more moon than Earth. (Mars)
11. The energy from this body provides light to the Earth. (Sun)
12. Only Jupiter is larger than this planet. (Saturn)
13. This planet is the best place for humans to live. (Earth)
14. This planet is the smallest. (Mercury)
15. Only Pluto is ever farther from the Sun than this planet. (Neptune)
16. This planet is more tilted than any other. (Uranus)