# Critical Thinking Skills

#### The Solar System

	Reading Comprehension								
Skills For Critical Thinking		Section 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Hands-on Activities
LEVEL 1 Knowledge	<ul> <li>List Details/Facts</li> <li>Recall Information</li> <li>Match Vocab. to Definitions</li> <li>Define Vocabulary</li> <li>Label Diagrams</li> <li>Recognize Validity (T/F)</li> </ul>	1 1 1 1	111	1 1	1111	1	1 1 1	< < < < <	<
LEVEL 2 Comprehension	<ul> <li>Demonstrate Understanding</li> <li>Explain Scientific Causation</li> <li>Rephrasing Vocab. Meaning</li> <li>Describe</li> <li>Classify into Scientific Capta s</li> </ul>			2	1	1	1	1	✓ ✓
LEVEL 3 Application	<ul> <li>Applie on to C vn ofe</li> <li>Mo el Scientific ocess</li> <li>Organia de Clasify Facts</li> <li>Utilize Alterrative Research Tools</li> </ul>	1	1	J	J	1	J	\ \	1
LEVEL 4 Analysis	<ul> <li>Distinguish Roles/Meanings</li> <li>Make Inferences</li> <li>Draw Conclusions Based on Facts Provided</li> <li>Classify Based on Facts Researched</li> </ul>	1	1	1		1	1	V	1
LEVEL 5 Synthesis	<ul> <li>Compile Research Information</li> <li>Design and Application</li> <li>Create and Construct</li> <li>Imagine Self in Scientific Role</li> </ul>	\frac{1}{1}	1	1	\ \ \	1	1	>>>	1
LEVEL 6 Evaluation	<ul> <li>State and Defend an Opinion</li> <li>Justify Choices for Research &amp; Topics</li> <li>Defend Selections and Reasoning</li> </ul>	1	1	1	1	1	1	1	/

Based on Bloom's Taxonomy





### **Asteroids, Meteors and Comets**

n addition to the planets, Sun and moons that make up our solar system, there are a lot of other objects floating around out there. Some of these objects are asteroids, comets and meteors.

**Asteroids** are the thousands of rocky lumps that form a circle around the Sun in a big band between Mars and Jupiter. One of the biggest asteroids, **Ceres**, is about 620 miles across. Others are as small as a grain of sand. More than 3 200 asteroids have been



identified so far. Asteroids are leftover rocks from the time when the planets were first formed. The asteroids in the **asteroid belt** never joined in forming the planets because the force of Jupiter's pull kept them where they were. Today, the asteroids continue to remain "stuck" in the asteroid belt.



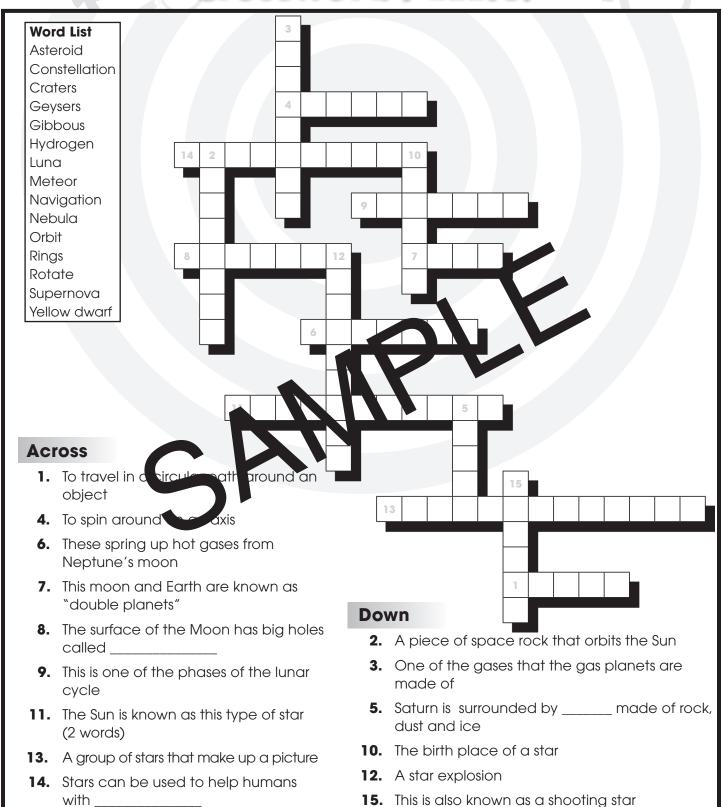
VISUALIZE: In thur note ook, draw a sketch of what you think an asteroid be thoks like in the solar system.

**Meteors** start off as lumps of rock in the **asteroid belt** between Mars and Jupiter. The rocks break out of the belt and travel on their own. Once they start flying through space, beyond the asteroid belt, they are called meteors. **Meteors** are also known as **shooting stars**. Rocks that are big enough to fly through the Earth's atmosphere and reach the ground without burning up, are called **meteorites**. When a meteorite hits the Earth it leaves a **crater** (or cavity) from the impact. Scientists think that 50 tons of these space rocks hit the Earth's surface every day!

**Comets** are different than asteroids and meteors because they are made of dust and ice, like dirty ice-balls. They are just a few miles in diameter. Usually, they just circle the outer edge of the solar system. Sometimes a comet is drawn toward the Sun and so it comes hurtling through the solar system. As it travels, it melts and leaves behind a **tail** of gas. This makes the comet look like it has a head and a tail.



#### Crossword Puzzle!





## Our Solar System





