



JPL



We're Ready... How about you? Join us as we Explore Jupiter

by the Galileo Outreach Coordination Team

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GALILEO CURRICULUM MODULE

Welcome to the first issue of the Galileo Curriculum Module! 1995 is a very exciting year for all of us. The Galileo spacecraft, after a 6-year journey, will arrive at Jupiter in December and begin a tour of the planet and its system of moons. Let us help you and your students understand and appreciate WHY we're going and WHAT we hope to learn there.

We've provided dashed lines as guides for cutting out single exercises. Each exercise's level of difficulty is expressed as:

- ☞ easy (no math or writing required)
- ☆ challenging (some math, writing or fairly difficult concepts to understand)
- ☆☆ advanced (higher math skills and / or background knowledge required)

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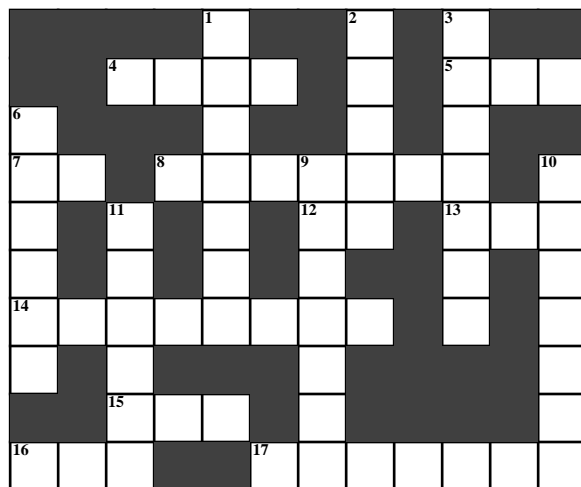
Here's a crossword puzzle that tests your knowledge of Jupiter. If you can't do it already, you should be able to completely fill out the puzzle after you've completed the other lessons in the Module.

DOWN

- (1) The King of Planets
- (2) Jupiter was hit by one (Shoemaker-Levy 9) in 1994
- (3) Number of moons at Jupiter
- (6) On Jupiter it's 9 hours 48 minutes (2 words)
- (9) He's credited with first having observed Jupiter's largest moons
- (10) On Dec. 7, 1995 an atmospheric Probe will provide this kind of report from Jupiter (Hint: think of local TV news)
- (11) Jupiter's nearest "Gas Bag" planetary neighbor

ACROSS

- (4) "Jupiter" Greek-style
- (5) Jupiter's outermost moons are covered with this substance often associated with Wayne Gretzky.
- (7) Are there mountains on Jupiter?
- (8) In terms of planet size how does Jupiter rate?
- (12) The Galileo spacecraft arrives __ Jupiter in December, 1995.
- (13) Common instrument used to view Jupiter at night: the naked ____.
- (14) In our Solar System, this "belt" separates the 4 inner planets from the 5 outer planets.
- (15) Short for Radio-isotope Thermolectric Generator, the power source on the Galileo spacecraft
- (16) Jupiter is 5 times farther from this than the Earth.
- (17) In 1979, this spacecraft flew past Jupiter and discovered a ring!!



What do YOU Know About Jupiter Already?

Find out ...

☞ TRUE OR FALSE: JUPITER, SATURN, URANUS AND NEPTUNE ALL HAVE RINGS.

- ☞ THE "GREAT RED SPOT" IS :
- (A) a huge volcanic plume.
 - (B) an ocean similar to Earth's Red Sea.
 - (C) where sunburned people go to meet each other.
 - (D) a big storm.

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- ☆ WHICH STATEMENT(S) IS / ARE LIKELY TO BE UTTERED BY JUPITER'S FIRST TOURISTS (there could be more than one):
- (A) "This rock looks really old"
 - (B) "The air sure smells great!!!!"
 - (C) "I've lost a lot of weight since leaving Earth!"
 - (D) "Looks like it might rain later"
 - (E) "It's cool but there's a lot of pressure to deal with"

- ☆ WHICH OF THESE STATEMENTS ARE TRUE?
- (A) Jupiter has 16 moons.
 - (B) Jupiter has a moon named Warren.
 - (C) About 400 years ago, Galileo saw 4 of Jupiter's moons.
 - (D) Jupiter's moons are all about the size of the Earth's Moon.
 - (E) One of Jupiter's moons has active volcanoes on it.



YOU'RE ABOUT TO BE STRANDED AT JUPITER! IN ORDER TO SURVIVE, WHICH OF THE FOLLOWING ITEMS (choose A or B from each line) WOULD YOU PREFER TO HAVE? WHY?

(This exercise is best done as a group activity)

A	B
SOLAR-POWERED ENGINE	NUCLEAR-POWERED ENGINE
SCUBA GEAR	FIRE-PROOF CLOTHES
HOT-AIR BALLOON	DUNE BUGGY
MATCHES	COMPASS
WATER	FOOD
CHAPSTICK	SUN TAN LOTION

