

WHAT ARE ASTEROIDS?

In a spectacular new IMAX experience, *Asteroid Hunters*, space will feel closer than you've ever imagined. You'll travel to the outer reaches of the Solar System and back to discover the origins of our planets and some dangers that may lurk ahead for our world.

There are hundreds of thousands of asteroids in our Solar System, and *Asteroid Hunters* will show you how scientists are studying them and why they matter. In the film, international scientists and engineers track the fictional asteroid Ficta A3D as it barrels towards Earth—watch and find out if it can be stopped.

HOW MUCH DO YOU ALREADY KNOW ABOUT ASTEROIDS?

Take this quiz to test your knowledge.

1. Asteroids are remnants left over from the early formation of our Solar System about:

- A. 4.6 billion years ago C. 4.6 million years ago
 B. 460 million years ago D. Don't know

2. When asteroids fall through Earth's atmosphere, air resistance causes them to burn up, creating a tail and flash of light. These are sometimes known as:

- A. Comets C. Meteorites
 B. Shooting stars D. Don't know

3. Most asteroids orbit the Sun within the main asteroid belt, which is located:

- A. Between Mars and Jupiter C. Between Earth and Venus
 B. Between Jupiter and Saturn D. Don't know

4. Asteroids are usually made of rock with bits of clay and metals like iron and nickel, but some asteroids contain:

- A. Petroleum C. Water
 B. Diamonds D. Don't know

5. The smallest asteroid that scientists have studied is 2015 TC25, a space rock only about 6 feet wide. The largest is Vesta, which is nearly as wide as:

- A. Rhode Island C. Texas
 B. Arizona D. Don't know



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6. Some asteroids have tiny moons that orbit around them, while others orbit together with a similarly sized partner; these are known as:

- A. Bola pairs C. Balanced pairs
 B. Binary pairs D. Don't know

7. Most asteroid impact craters on Earth have been worn away by erosion, but with new technology, scientists have now located about _____ craters on Earth.

- A. 200 C. 1,000
 B. 500 D. Don't know

8. Scientists believe that there are about a billion asteroids in the Solar System and that the total mass of all the asteroids combined is:

- A. More than the mass of the Sun C. Less than the mass of the Moon
 B. Equal to the mass of Earth D. Don't know

9. Asteroids that orbit within 18.6 million miles of Earth's orbit are classified as:

- A. Extraterrestrial Objects (ETOs) C. Deep Space Objects (DSOs)
 B. Near-Earth Objects (NEOs) D. Don't know

10. Asteroids that orbit within 4.65 million miles of Earth and are large enough to survive a fall through our atmosphere are classified as Potentially Hazardous Asteroids (PHAs). So far, scientists have identified about _____ PHAs.

- A. 20,000 C. 200
 B. 2,000 D. Don't know

FRONT ROW SEATS! Reading about asteroids on paper is no comparison to experiencing *Asteroid Hunters* in IMAX. If you get the chance to see the movie, write two new questions based on asteroid facts and technologies you learn and quiz a friend.

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