Barringer Crater

- This crater is located in Arizona, USA
- It was created 50,000 years ago by a chunk of METAL from space
- It measures about 1.2 km in diameter

Size of crater compared to a stadium
Ceres

- Ceres is the largest object between the orbits of Mars and Jupiter
- It is made mostly of **ROCK** and **ICE**
- Ceres is about **950 km** in diameter

Ceres (bottom left) compared to the Earth and Moon
Earth

- It orbits the Sun between Venus and Mars
- Earth is made of ROCK, a METAL core and both solid and liquid ICE (water, that is) on its surface
- Its diameter is 12,650 km

Size of Earth compared to Jupiter
Earth’s Moon

- The Moon orbits Earth
- It is made of **ROCK** with a small **METAL** core
- The Moon is **3,500 km** in diameter or about ¼ the width of Earth

Size of Moon compared to Earth
Eros

- The orbit of Eros ranges between Earth and Jupiter, crossing Mars’s orbit
- It is a mixture of **ROCK** and **METAL**
- This object is **34 km** on its longest side

Size of Eros compared with Manhattan
Gaspra

- This object orbits the Sun between Mars and Jupiter
- It is made of a mixture of ROCK and METAL
- It is 18 km on the longest side

Size of Gaspra compared to Manhattan
Hale-Bopp

- Hale-Bopp orbits between Earth’s orbit and the distant Solar System — far beyond the orbit of Pluto
- Hale-Bopp is made of \textit{ICE} and \textit{DUST}
- The tail shown here extends more than \textbf{1 million km}
Hoba

- This object landed on Earth 80,000 years ago in what is now the country of Namibia
- Hoba is made of METAL
- It measures about 3 meters across
**Iapetus**

- Iapetus orbits Saturn
- This walnut-shaped object is made of **ICE** with some **ROCK**
- It is **1,500 km** across, or about half as wide as the Earth’s Moon

Size of Iapetus compared to Moon
Ida and Dactyl

- Together they orbit the Sun between the orbits of Mars and Jupiter. Dactyl (the smaller object) orbits Ida.
- They are mixtures of **ROCK** and **METAL**
- Ida is about **15 km** across

Size of Ida compared to Manhattan
Itokawa

- Itokawa’s orbit crosses the orbits of Earth and Mars but is not a threat to either
- It is made of a loose pile of boulders made of ROCK and METAL
- Its longest side is 535 meters

Size of Itokawa compared to a stadium
Jupiter

- Jupiter orbits the Sun between the Asteroid Belt and Saturn
- It is made of **GAS**
- Its diameter is about **143,000 km**

Size of Jupiter’s Red Spot compared to Earth
Mars

- The orbit of Mars is between Earth and the Asteroid Belt
- Mars is made of **ROCK** with a **METAL** core and some solid **ICE** on its surface
- It is **6,800 km** in diameter, about half as wide as the Earth

Size of Mars compared to Earth
Meteor

- Meteors occur in Earth’s atmosphere, about 75km above the surface.
- We see the glowing pieces of ROCK.
- The pieces of rock are mostly less than 1cm, or the size of a coin.

Size of rock compared to a coin.
Meteorite

- Meteorites are pieces of asteroids that land on other worlds
- They are made of **METAL** and **ROCK**
- Almost all meteorites on Earth are smaller than **1 meter**
Phobos

- Phobos closely orbits Mars and will eventually collide with it
- It is mostly made of ROCK but may have ICE inside
- Phobos is about 11 km across

Size of Phobos compared to Manhattan
Pluto & Charon

- Pluto and Charon orbit each other, together are mostly outside Neptune’s orbit.
- These round objects are made of **ICE** and **ROCK**.
- Pluto is about **2,300 km** across.

Size of Pluto & Charon compared to Earth and Moon.
Saturn

- Saturn orbits the Sun between Jupiter and Uranus
- Saturn is mostly made of GAS
- The main body is 120,000 km across

Size of Saturn compared to Earth
Shoemaker-Levy 9

- Its orbit originally took it beyond Pluto. After it was captured by Jupiter's gravity, it was torn apart and eventually smashed into Jupiter.
- Made of **ICE** and **ROCK**
- Largest pieces were **1km** and left huge marks on Jupiter
• The Sun is located in the center of our Solar System
• It is made mostly of hydrogen and helium GAS
• The Sun is 1.4 million km in diameter

Size of Sun compared to Jupiter
Victoria Crater

- This crater is one of the smaller craters on Mars
- The rim’s jagged edges are due to erosion caused by ROCK and DUST
- It is 750 meters across

Size of crater compared to a stadium
Titan

- Titan orbits Saturn
- It is made of **ROCK** and **ICE** and has a thick atmosphere
- It is **5,150 km** in diameter, between the size of the Earth and Moon

Size of Titan (center) compared to the Earth and Moon
Wild 2

- Wild 2 orbits the Sun between Mars and Jupiter, though its orbit used to be much more distant.
- It is made of **ICE** and **DUST**.
- It is about **4 km** across.

Size of Wild 2 compared to Manhattan
Eris

- The orbit of Eris is very distant, mostly beyond Pluto’s orbit.
- It is made of **ICE** and **ROCK**
- The diameter of Eris is about **2,600 km**

Size of Eris compared to Pluto