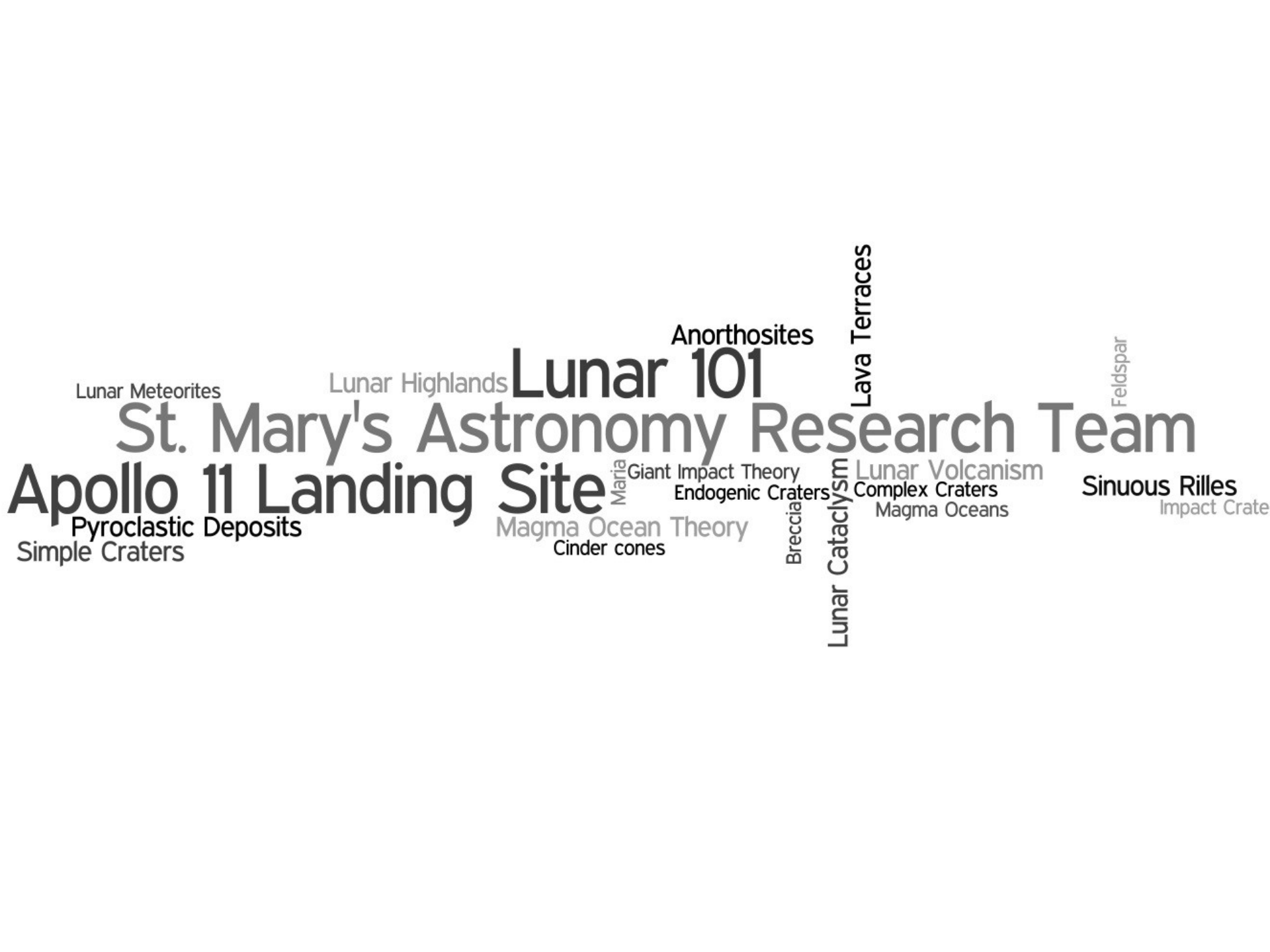

Anorthosites
Lava Terraces
Lunar 101
Lunar Highlands
Lunar Meteorites
Feldspar
St. Mary's Astronomy Research Team
Apollo 11 Landing Site
Maria
Giant Impact Theory
Lunar Volcanism
Endogenic Craters
Complex Craters
Sinuous Rilles
Magma Oceans
Impact Crate
Pyroclastic Deposits
Magma Ocean Theory
Breccia
Lunar Cataclysm
Simple Craters
Cinder cones

Why Should We Study the Moon?

The moon is our nearest celestial body, so we should know something about it. Before we can understand our universe, we as a people should not be asking questions like…

Resolved Question

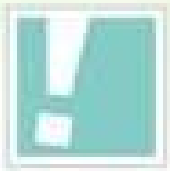
Does the moon really exist, or is it just what the media want us to believe?

Best Answer - Chosen by Asker

The Moon Does Not Exist! The authorities expect you to simply take at their word the absurd and unfounded story that there is a large mass orbiting the earth.

:p
Source(s):
http://www.revisionism.nl/Moon/The-Mad-Revisionist.htm

Asker's Rating: *****
Finally, someone who thinks the same way



Cherenfant Mre semmy hyasmine

Open Question

Show me another »

Do we have more that 1 moon?

i would like to know exactly how does the planetes works does the moon goes around the earth does it change shape or we have more than one moon

4 minutes ago - 4 days left to answer.

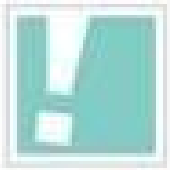
FAIL

Report Abuse

Answer Question

Action Bar: Interesting! Email Save

Answers (1)



Bob the Unbuilder

Yes, we have three, the moon you can see at night, and the other two you cant see. We cant see them because of the way the sun reflects on them.

Source(s):
Im an astrofisist.

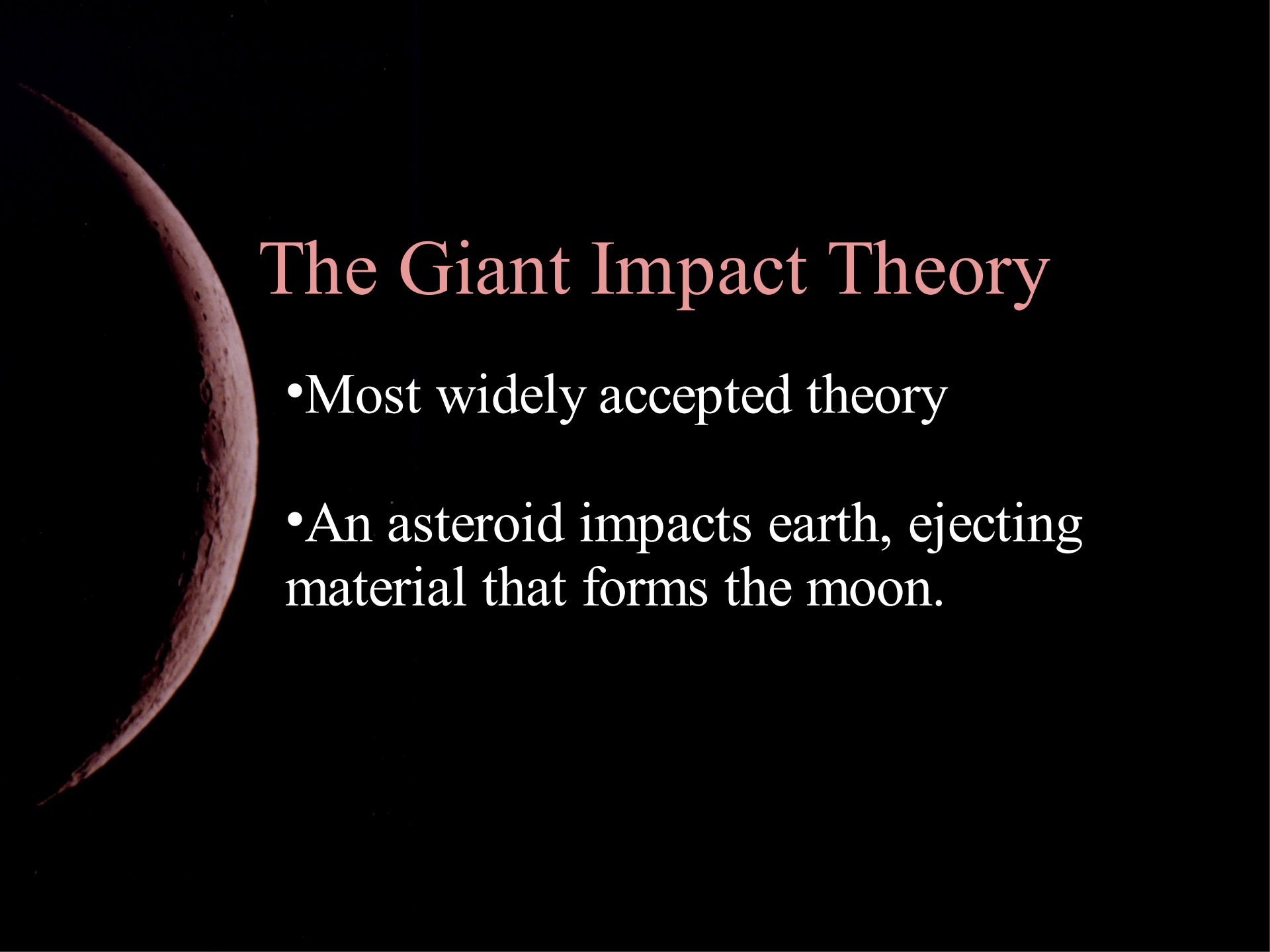
52 seconds ago

Report Abuse

1 0

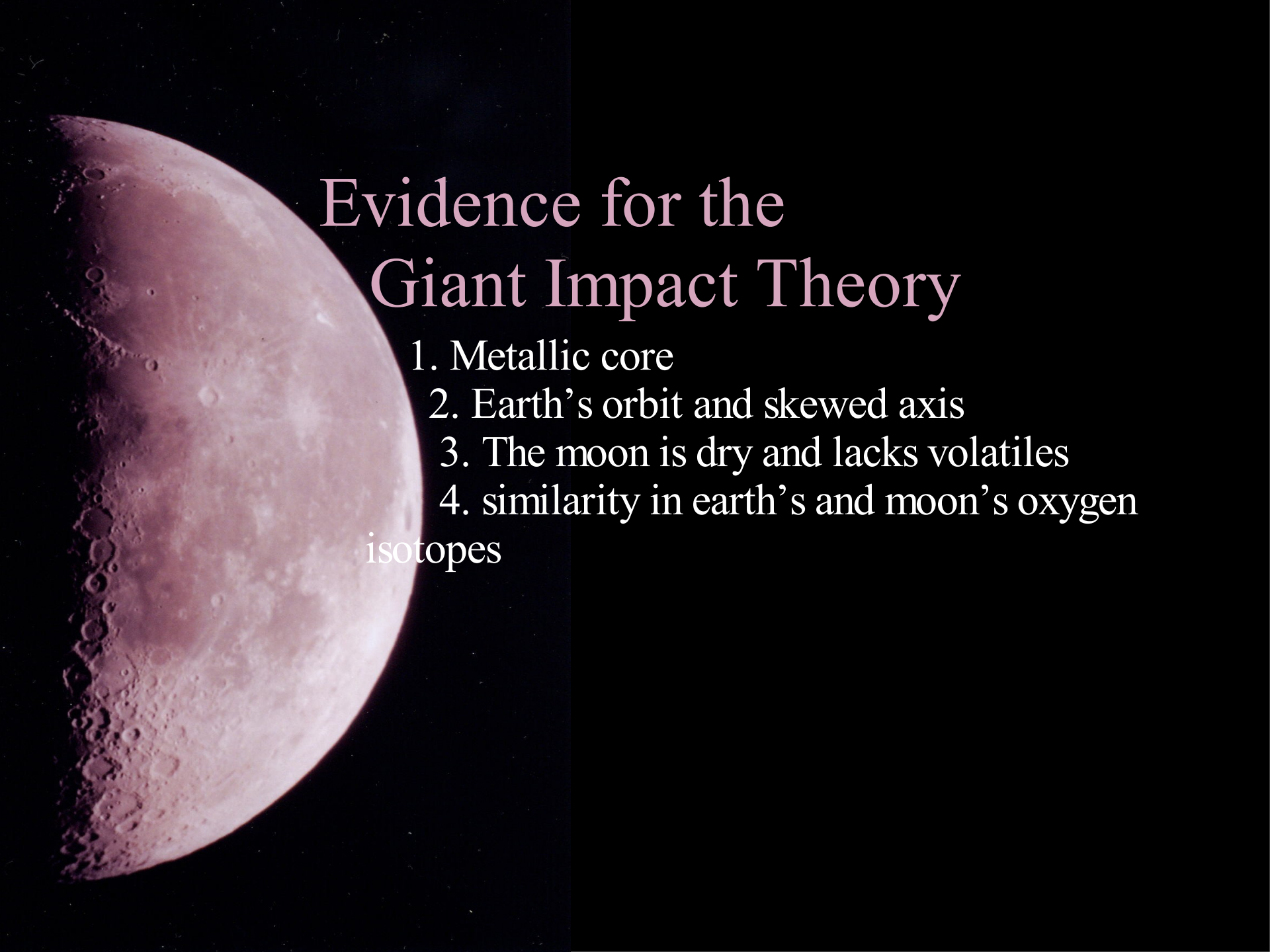
Thanks for rating!

How Did the Moon Form?



The Giant Impact Theory

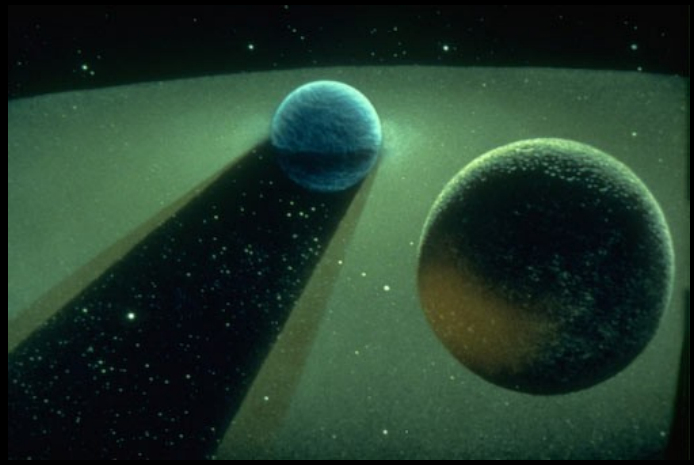
- Most widely accepted theory
- An asteroid impacts earth, ejecting material that forms the moon.



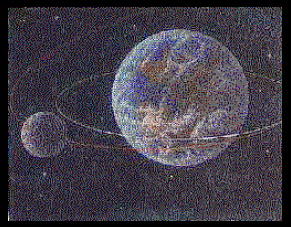
Evidence for the Giant Impact Theory

1. Metallic core
2. Earth's orbit and skewed axis
3. The moon is dry and lacks volatiles
4. similarity in earth's and moon's oxygen isotopes

Capture Theory



An asteroid was caught in the earth's orbit, and became our moon.



Problems:

- Astronomically low chance
- Doesn't explain similarity of elements on earth and moon

Fission Theory

The earth spun so rapidly that the material broke off to form the moon.

Explains why the moon is less dense; the dense, heavier materials would have sunk down and later formed the earth.

Problems:

- Why would the earth spin so quickly?
- Lunar and terrestrial rocks differ in composition
- Differing oxygen isotopes.
- The ratio of iron oxide to magnesium oxide differs.

Double Planet Theory

The Moon and Earth formed simultaneously from a cloud of gas and dust.

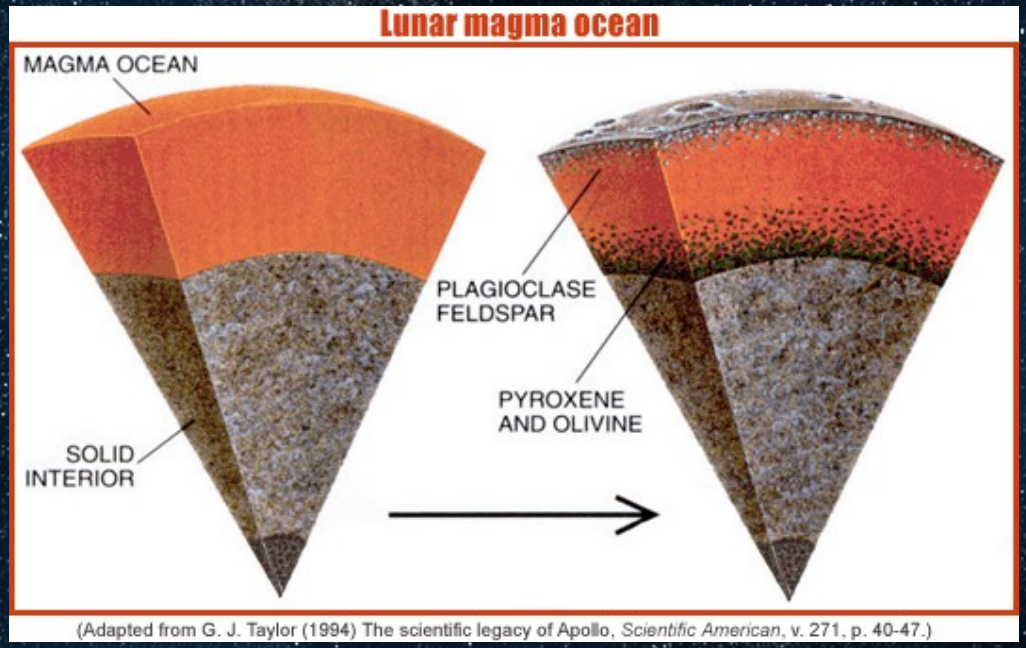
Explains Oxygen Isotopes

Problems:

- Energy required to revolve around the earth
- Earth and moon core composition differences

Magma Ocean Theory

- Plagioclase feldspar floats
- Basalts (Pyroxene and Olivine) sink
- Where did the energy come from? The sinking of core and formation.

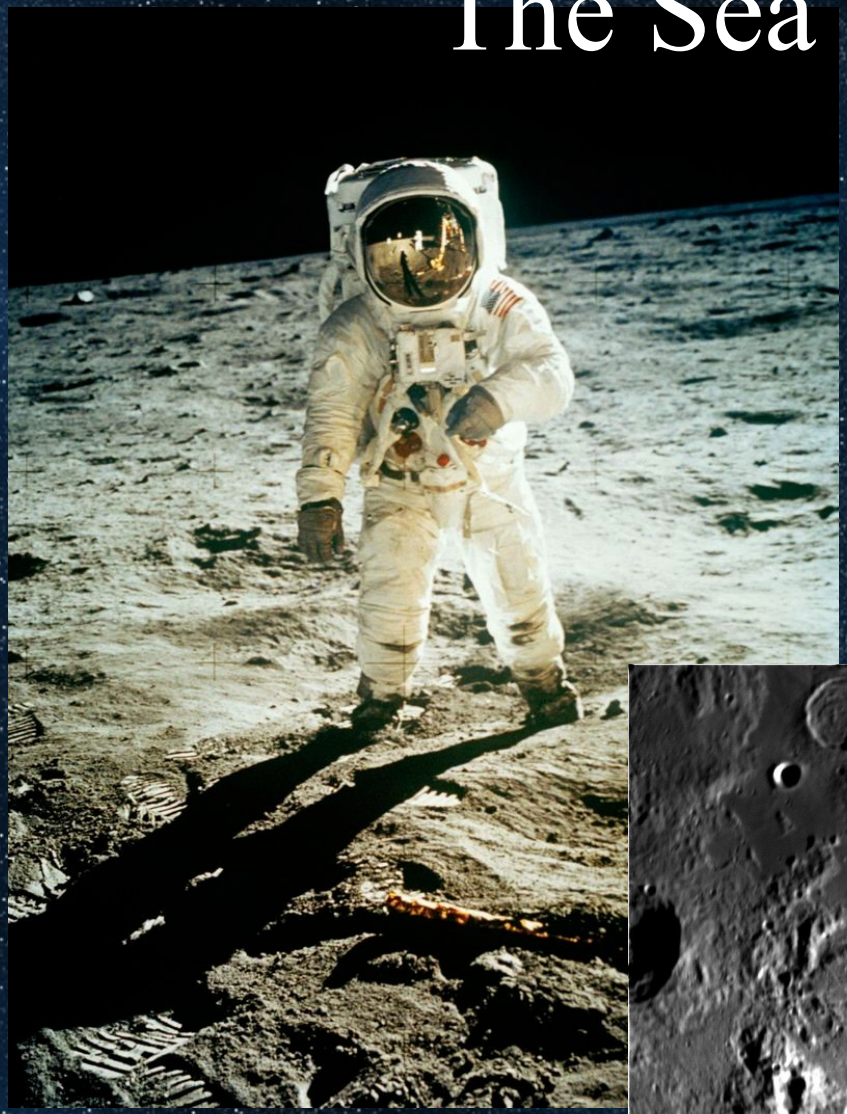


What were the Apollo Missions?
Where on the moon were they?

Apollo Missions

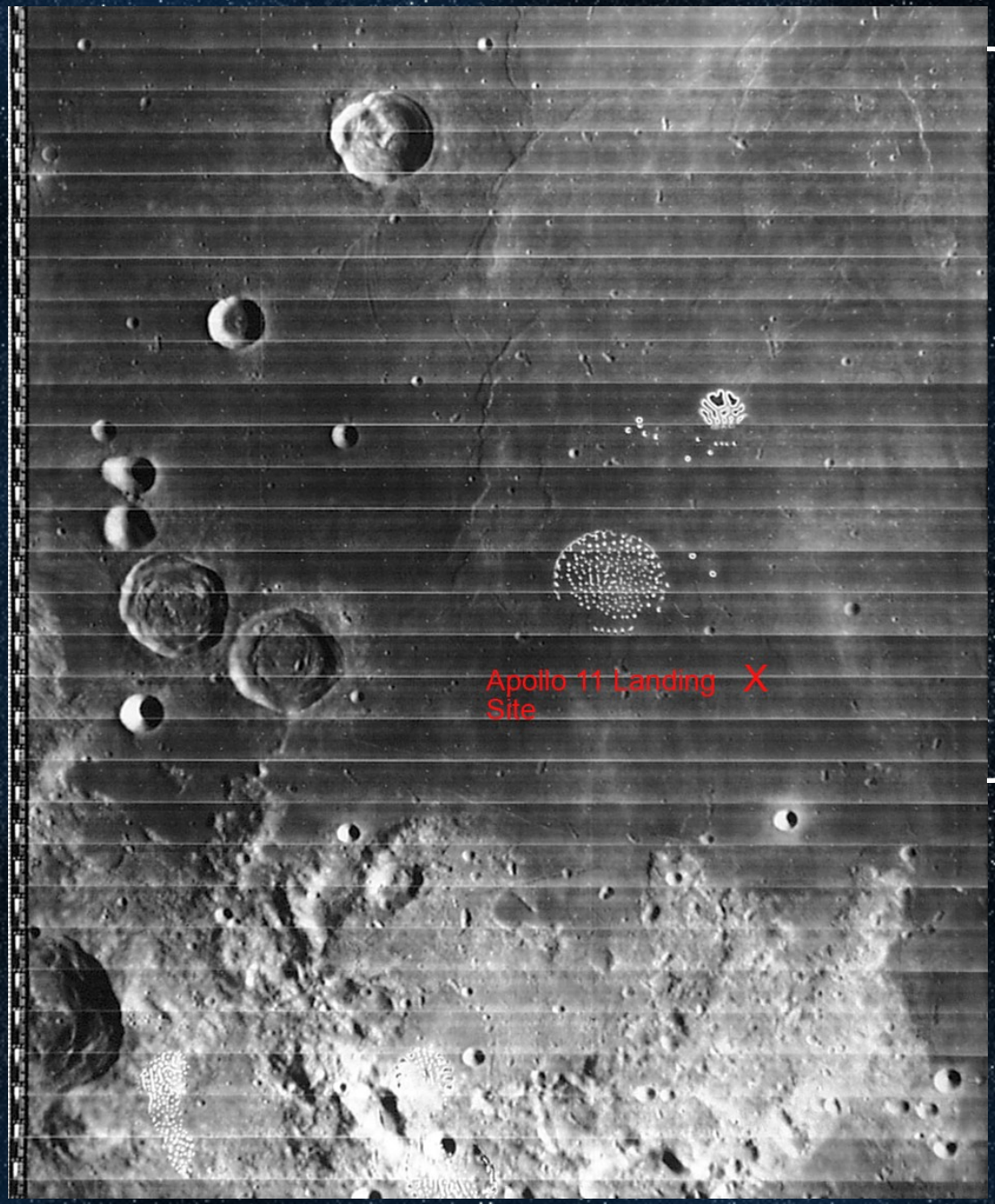
- Following Gemini and Mercury Programs
- Apollo 8 through 17
- Goal: To develop technology to send man into space
- Beat Soviets in the space race
- Collect samples from the moon
- Apollo 11 mission landed men on the moon

The Sea of Tranquility



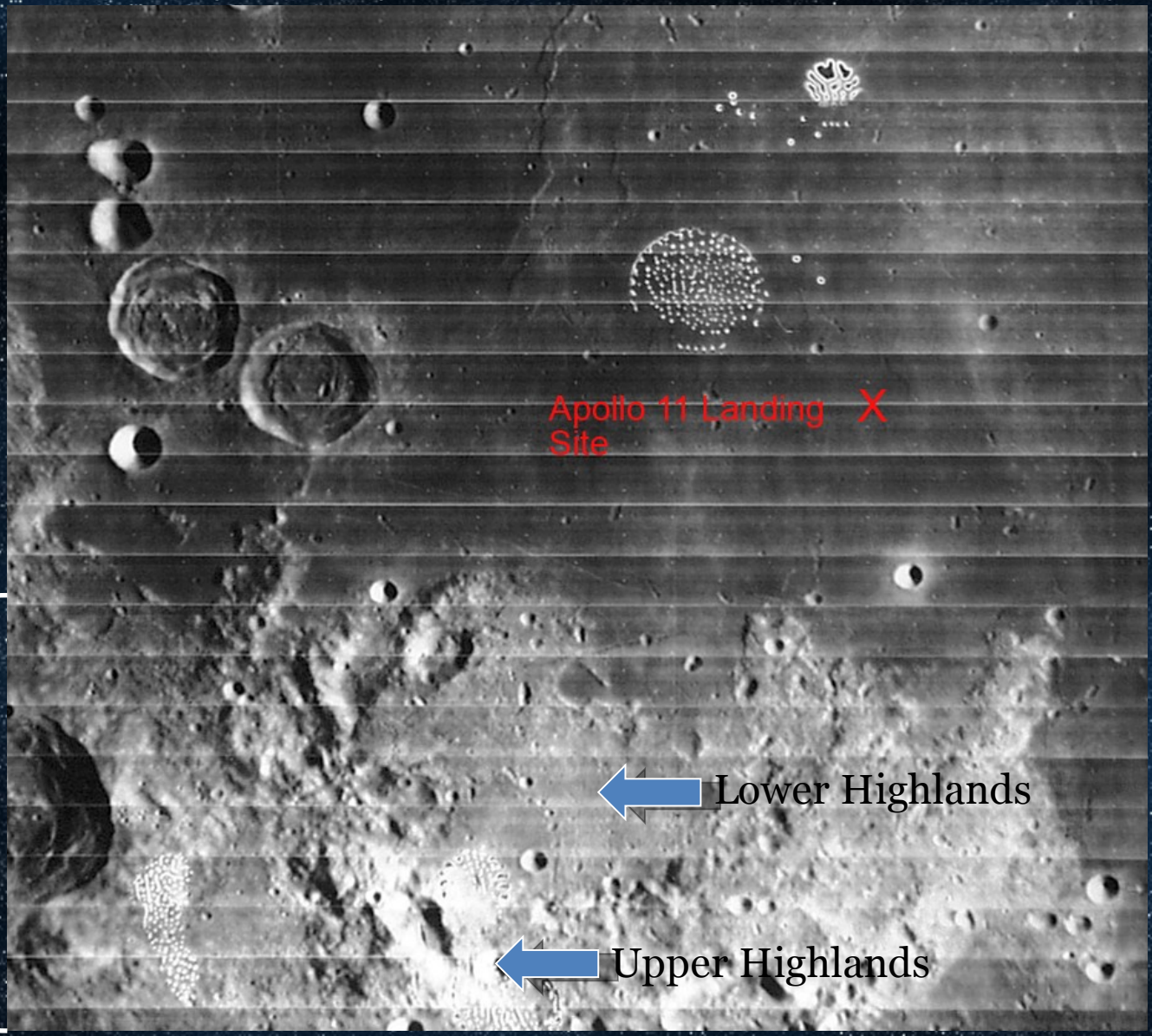
- Site of Apollo 11 landing
- Latin name: Mare Tranquillitatis
- Earlier mistook to be a sea of water
- Basalt gives it a dark color

What Features are at the Apollo 11 Landing Site


Apollo 11 Landing Site
X
Mare

Maria

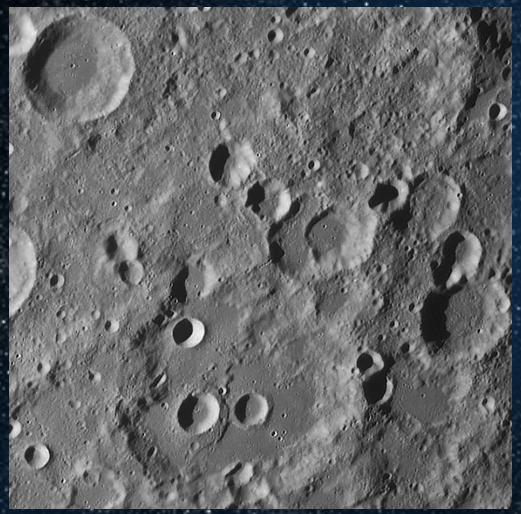
- Maria: Large, basalt plains
- Basalt: Dark, fine-grained rock

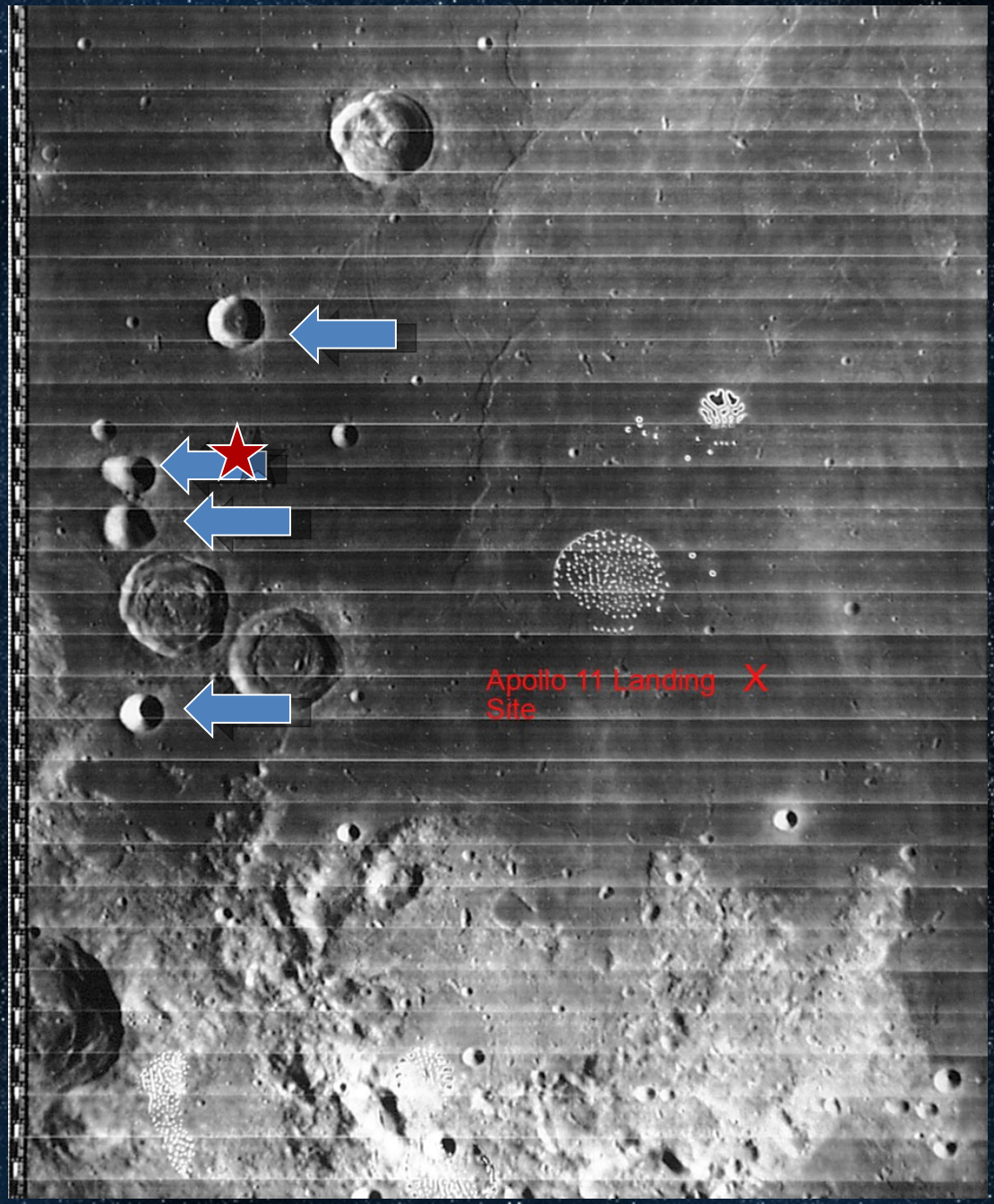


General Highlands

Highlands

- Highlands older than Maria
- Composed primarily of plagioclase feldspar in anorthosites
- Top layer of Regolith (dirt)
- Magma Ocean Theory
- Upper vs. Lower Highlands

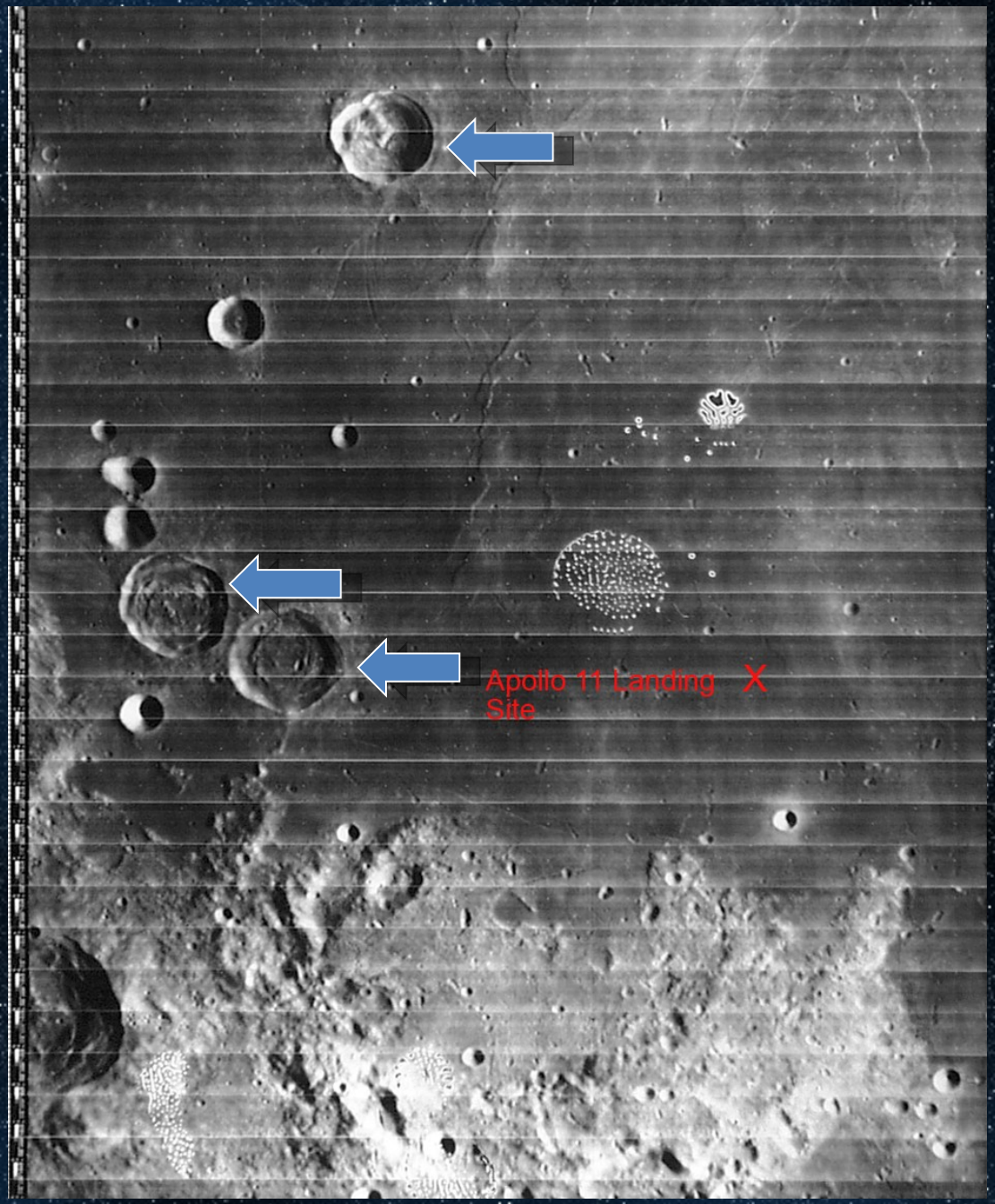




Key:

Simple Craters

Crater that Impacted at an Angle



Complex Craters

Craters

- The surface of the moon
- No atmosphere, erosion, and little geologic activity.
- Craters range in size
- Enormous craters have been flooded by lava, and only parts of the outline are visible.
- The low elevation Maria vs. other areas
- many Rupes (lines of mountainous cliffs or scarps) on the lunar surface, remnants of the rims of ancient craters


Future Moon
OOF!

Different Types of Impact Craters

- The size, mass, speed, and angle of the falling object determine the size, shape, and complexity of the resulting crater.

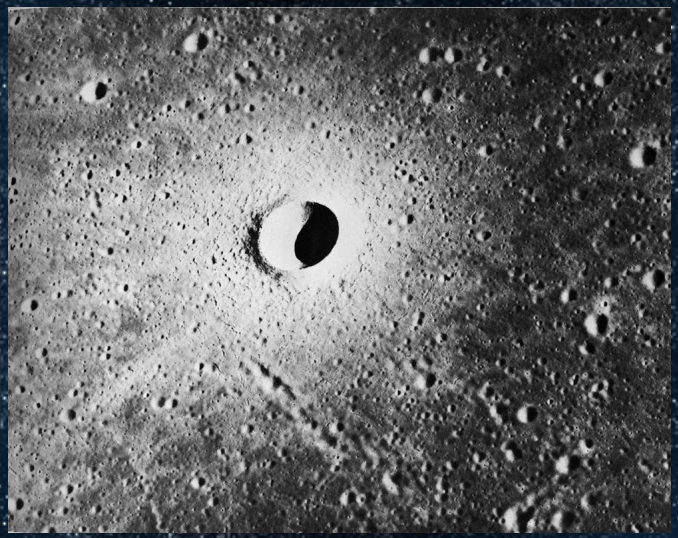
- Types:
  Simple
  Complex
  Basins

Simple Craters

- Bowl-shaped depressions.

- Diameter less than 9 miles (15 km).

- When recently formed they have raised rims on the edges, sharp features, and smooth walls.



Moltke crater, a simple crater with a diameter of 4.3 miles (7 km).

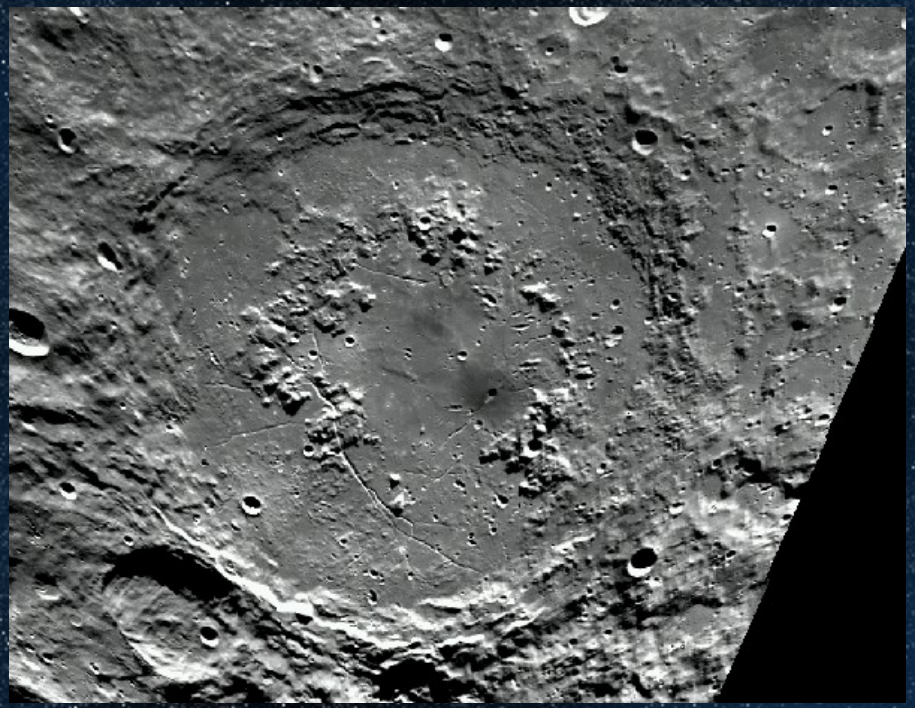
Complex Craters

- Single or multiple peaks in the middle of the crater.
- Diameters between about 12 and 110 miles (20 and 175 km)
- Central uplift is usually one or a few peaks.
- A diameter over 110 miles (175 km) can have more complex, ring-shaped uplifts within the crater.

Euler crater, a complex crater with a diameter of 17 miles (28 km) and a depth of 1.5 miles (2.5 km).

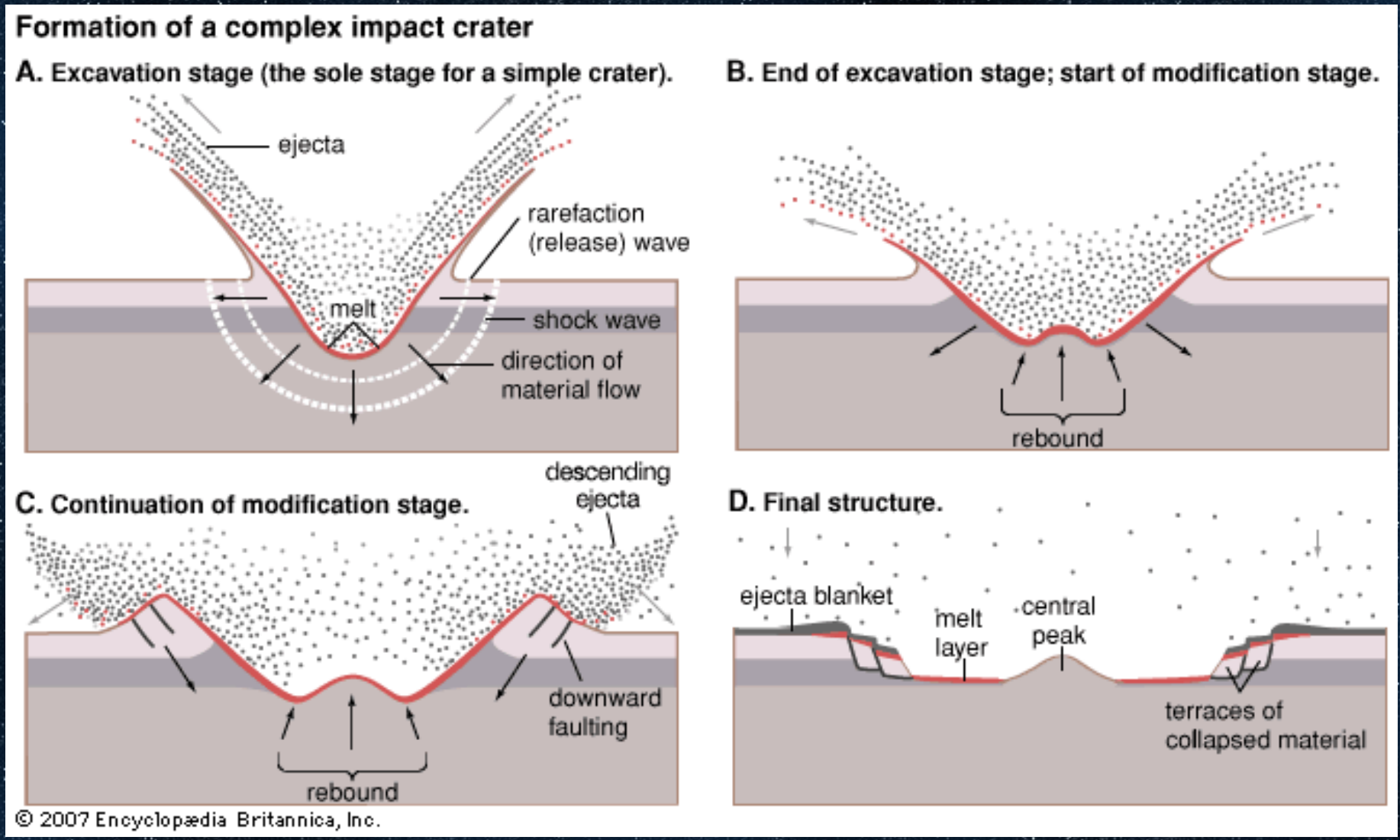
Basin Impact Craters

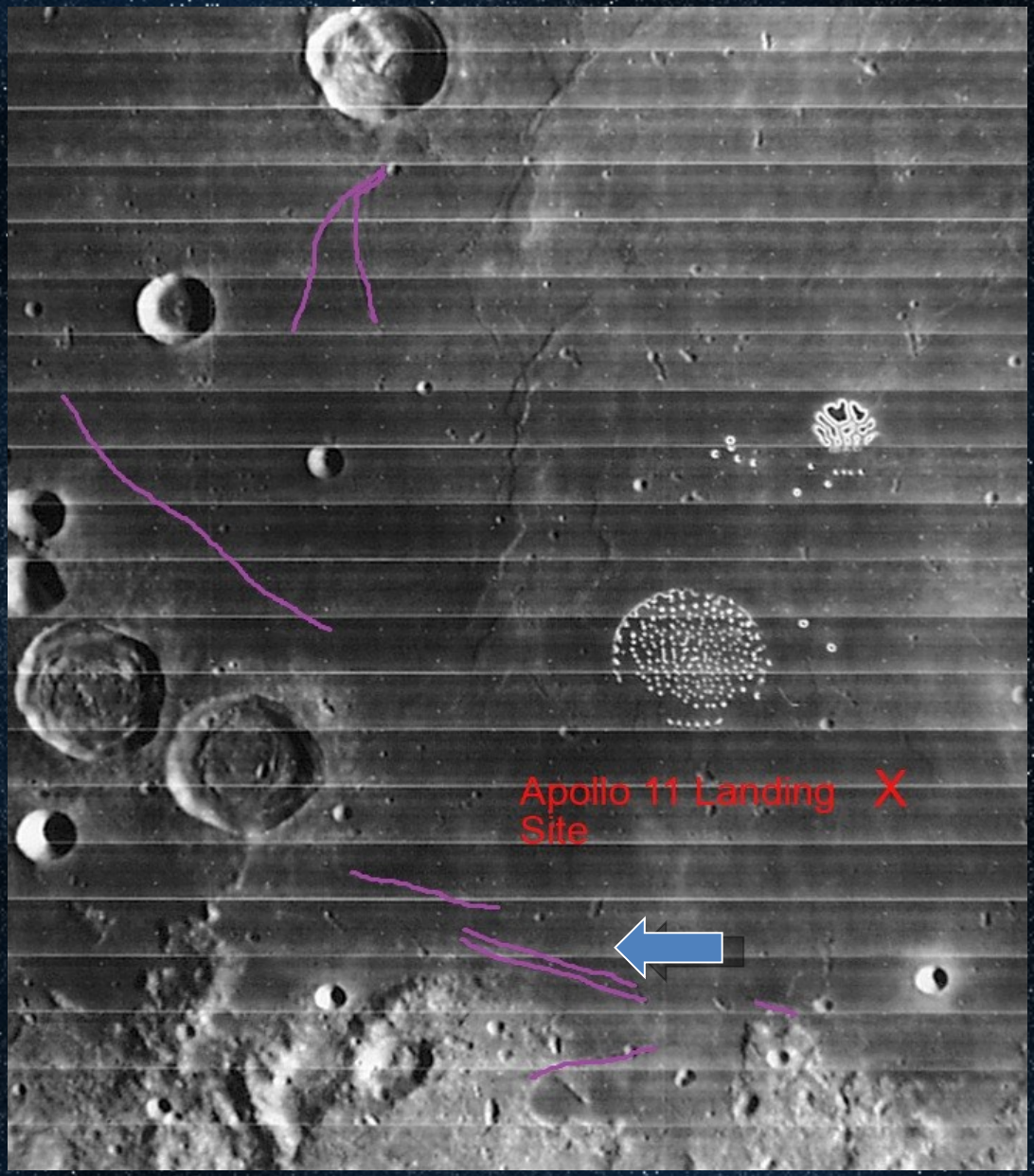
- Diameter greater than 185 miles (300 km).
- Over 40 impact basins on the Moon.
- Produce faulting and other crust deformations.



The lunar basin Schrodinger is 200 miles (320 km) in diameter. Schrodinger also has an inner ring which is 92 miles (150 km) in diameter and about 75 percent complete. Schrodinger is one of the youngest impact basins on the Moon.

Formation of Craters





Rilles (Purple)

Grabens

Rilles

Rilles (German for ‘Groove’): Long, narrow depressions in the moon's surface resembling channels.

Straight Rilles
Grabens
Pressure Underneath

Arcuate Rilles
Edge of dark, level maria

Sinuous Rilles
Lava Flow

Anne Oursler, Monika Ruppe, Kayla Stevenson, Nolan Peard, Dashton Peccia, Anna Thorndike, Cody Holliday, Corey Cattanach, and Emma Dauterman

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- **http://en.wikipedia.org/wiki/Rille**
- **http://en.wikipedia.org/wiki/Lunar_mare**