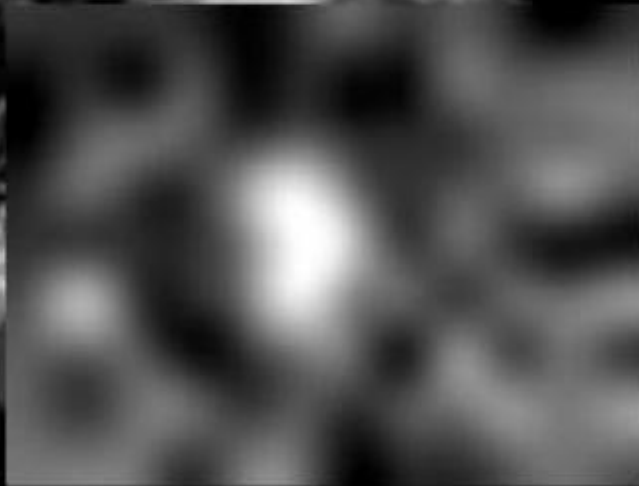
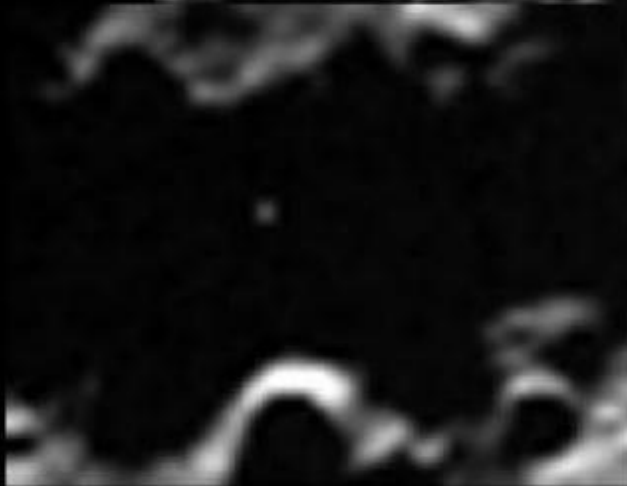
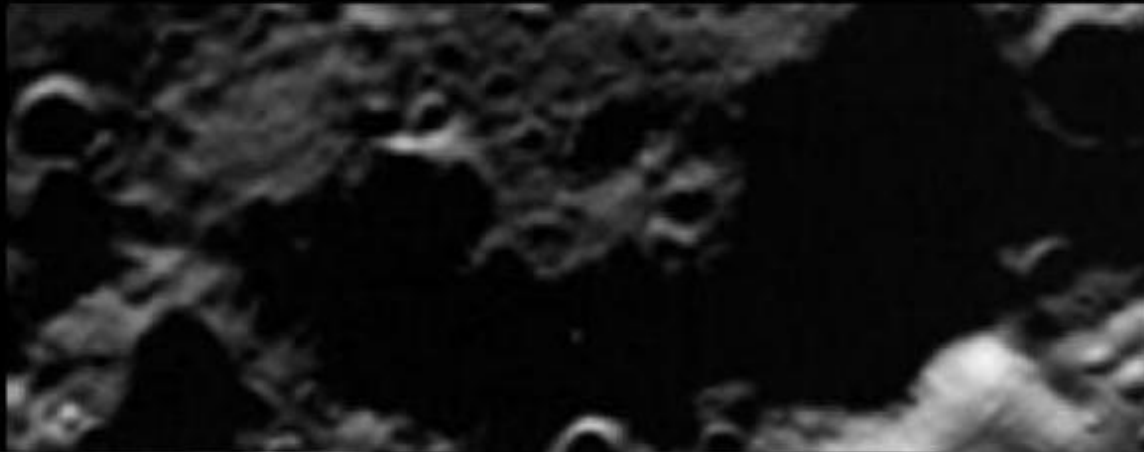


Surface of the Moon



LCROSS

MIR Flash Detection

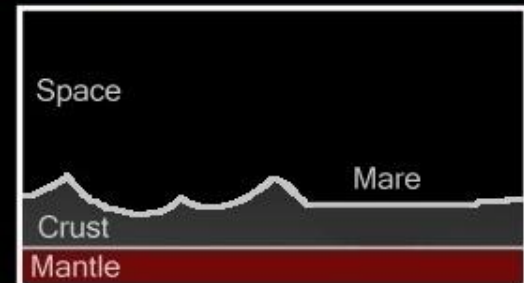
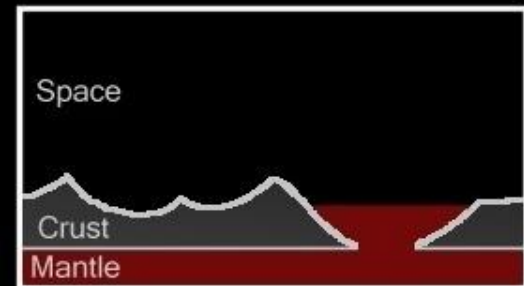
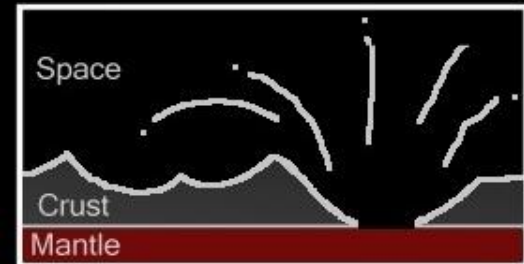
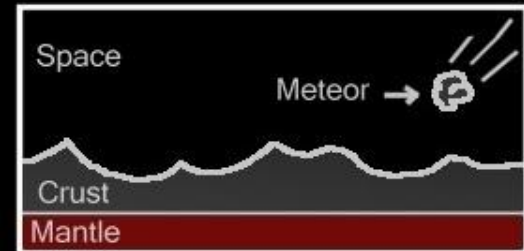


Synchronous Orbit

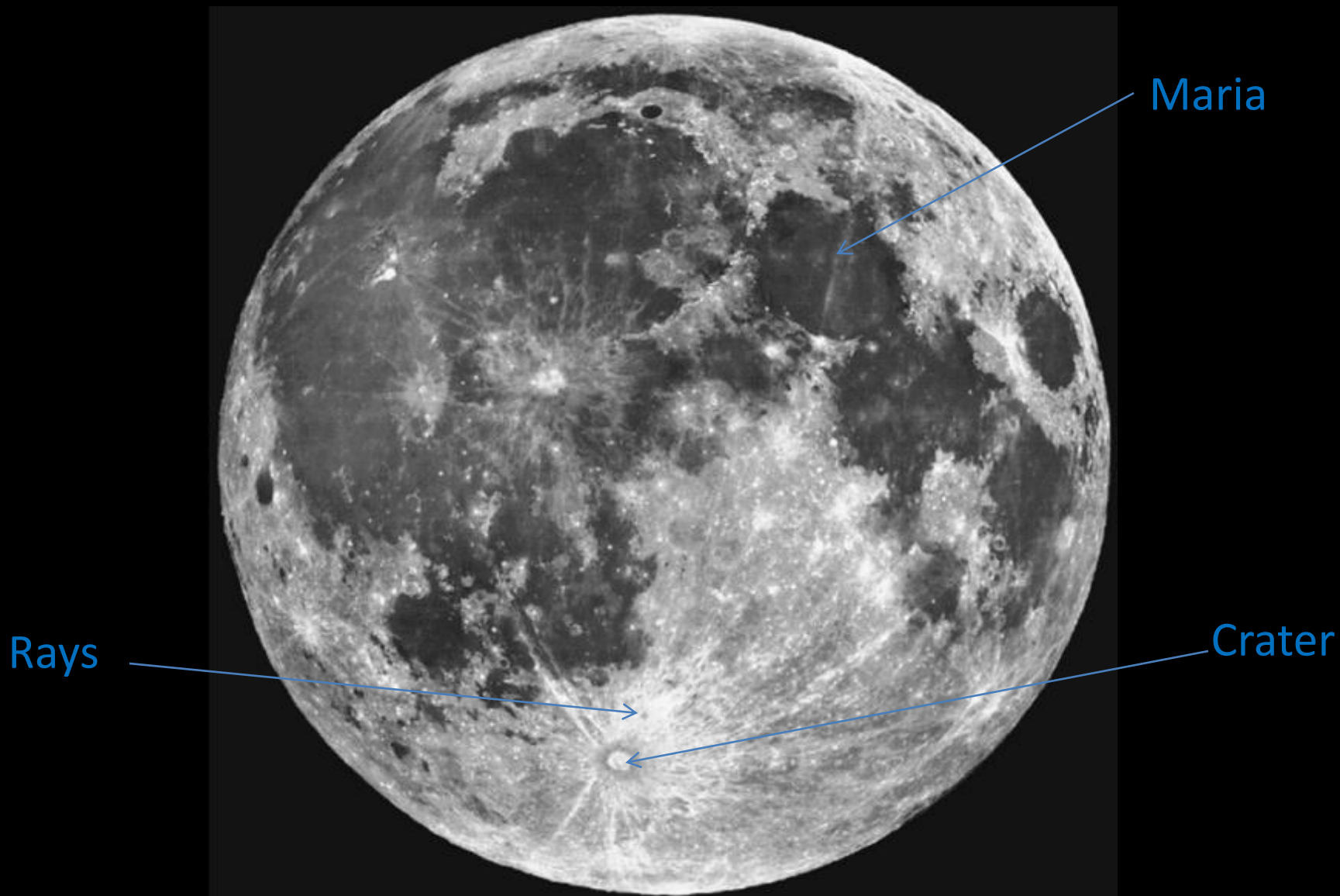
- Moon orbits the Earth in the same amount of time as it takes to rotate on its axis
- This results in us being only able to see one side of the Moon from Earth, the so-called Near-Side
- Unable to see the Far-side until the 1960's and 1970's when we sent spacecraft

Craters and Maria

- Craters formed when meteorite smashes into surface
- Can have rays and central peaks
- If impact reaches the mantle, maria can form
- Can use craters for relative dating



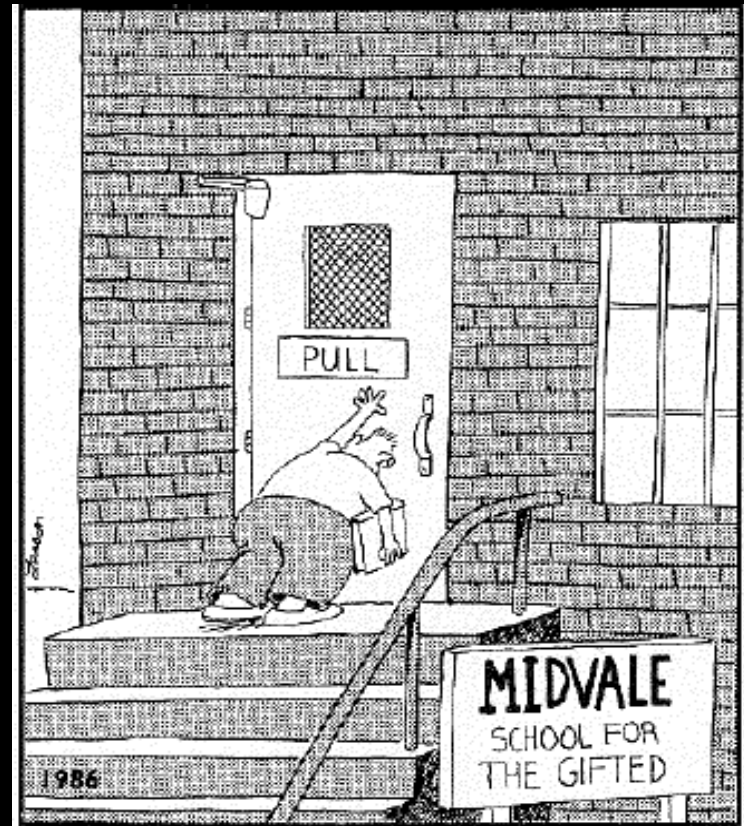
The Moon



The Far Side



Near Side



Far Side

The Far Side



Near Side



Far Side

Formation

- Best theory currently – Giant Impact!
- Mars-sized object hit Earth early in its history, but after it differentiated
- Matter thrown into orbit formed the Moon
- You will be investigating this later in lab!

Tips

- #1 – approx. number is fine
- #2 – choose image 4 or 5
- #3 – assume mountain is rectangle or circle, use scale, Organ mountains about 200 km²
- #10 – specific answer (maria vs. highlands)
- #12 – think about percentages