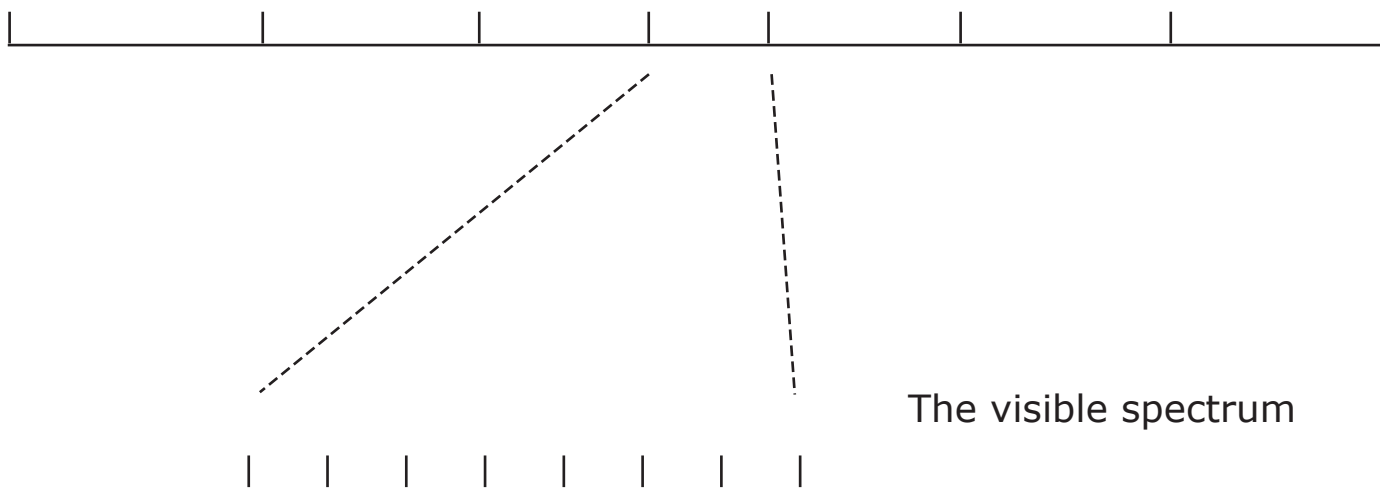


LIGHT

Kinds of light:



THEMIS
filters

Filters used in video/digital cameras:

A red filter allows _____ light through.

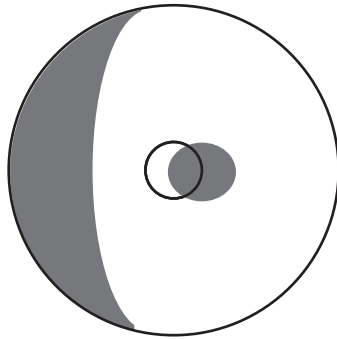
A green filter allows _____ light through.

A blue filter allows _____ light through.

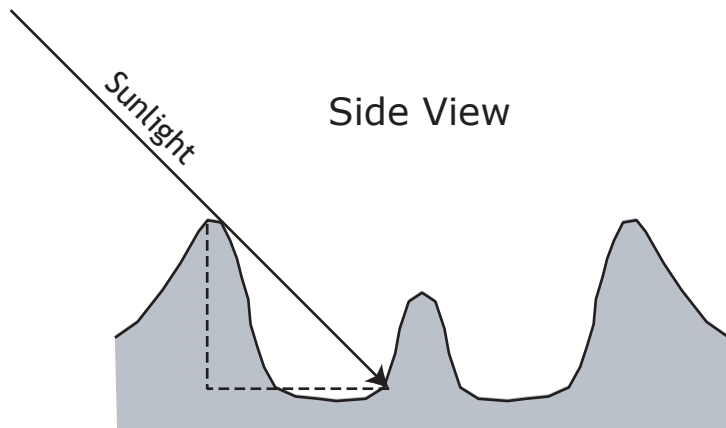
Additional Notes:

Crater Depths and Central Peak Heights

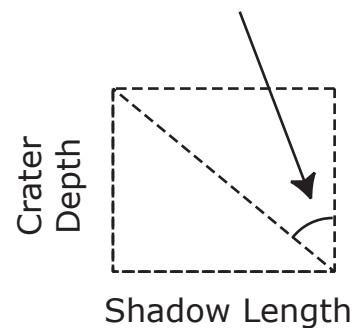
Top View



Side View



Sun angle: _____



To find the depth of the crater:

First, convert shadow length from pixels to kilometers

$$\text{Shadow Length (pixels)} \times \text{m per pixel} = \text{Shadow Length (m)}$$

Additional information:

$$\text{Tan} (\text{Sun angle}) = \text{Tangent of Sun angle}$$

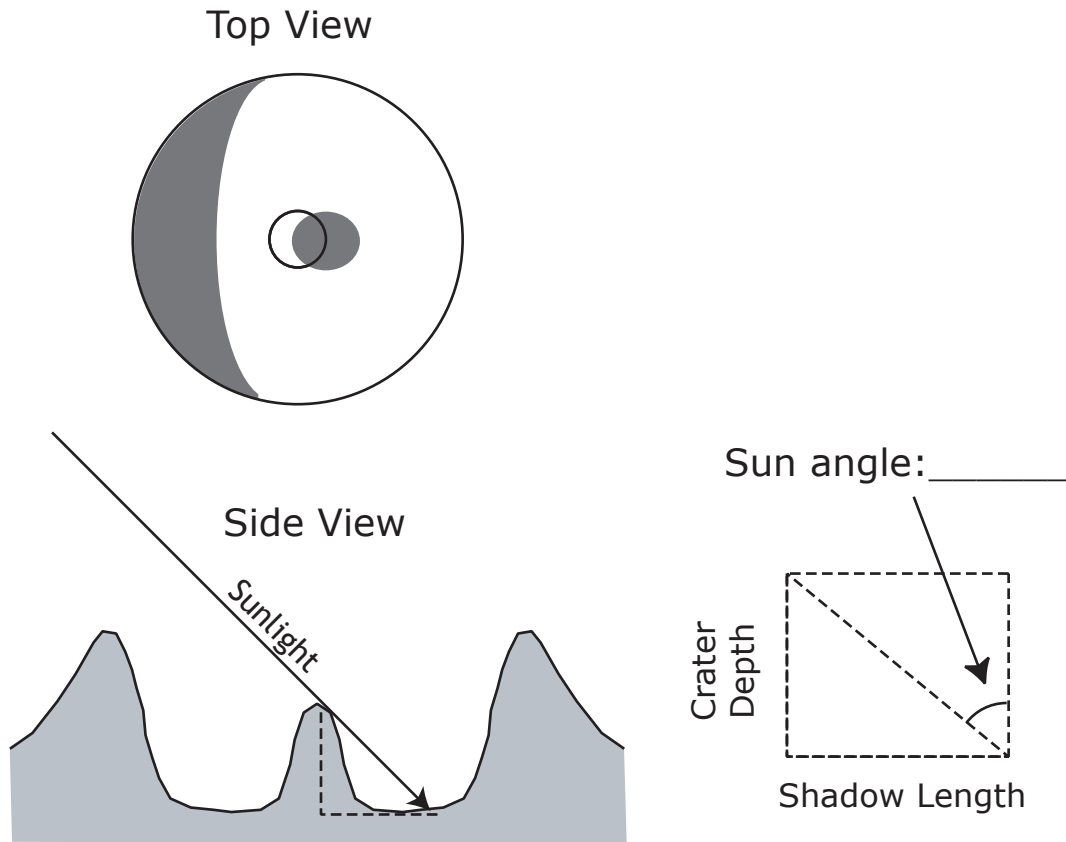
To find crater depth:

$$\text{Shadow Length (m)} \div \text{Tangent of Sun angle} = \text{Crater Depth (m)}$$

How many kilometers is this?

$$\text{Crater Depth (meters)} \div \text{meters per km} = \text{Crater Depth (km)}$$

Crater Depths and Central Peak Heights (Cont.)



To find the height of the central peak:

First, convert shadow length from pixels to kilometers

$$\text{Shadow Length (pixels)} \times \text{m per pixel} = \text{Shadow Length (m)}$$

Additional information:

$$\text{Tan} (\text{Sun angle}) = \text{Tangent of Sun angle}$$

To find the height of the central peak:

$$\text{Shadow Length (m)} \div \text{Tangent of Sun angle} = \text{Height of Peak (m)}$$

How many kilometers is this?

$$\text{Height of Peak (meters)} \div \text{meters per km} = \text{Height of Peak (km)}$$

Crater Counts and Relative Ages

Notes

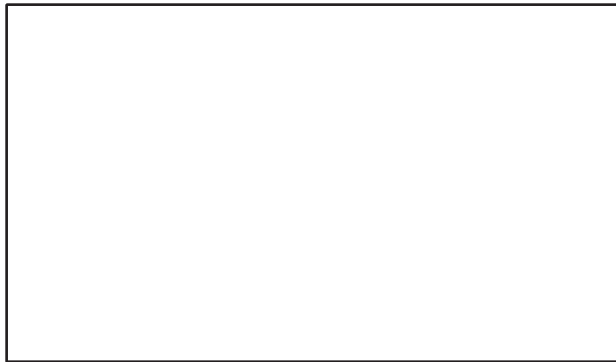
New Mars + a billion years

Newest Region?

Left side

Right side

Both sides same age





Olympus Mons Erupts

Newest Region?

Left side

Right side

Both sides same age



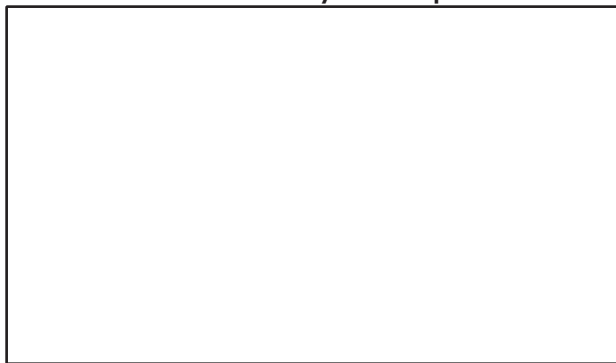
Another billion years passes...

Newest Region?

Left side

Right side

Both sides same age



Additional Notes:
