

ROTATION VS. REVOLUTION

1 Earth year = 365.25 days
* Known as Revolution

1 Earth day = 24 hours
* Known as Rotation

Tilted on axis @ 23.5°
moves in counter clockwise
direction

Sun appears to rise in
east; set in west

day/night cycle result of
Earth's rotation

SEASONS

Caused by Earth's tilt

Summer Solstice = June 21
* most daylight

Winter Solstice = Dec. 21
* most night

Equinox = day/night equal

Spring = March 21

Fall = Sept. 23

MOON

Rotates on axis around Earth.

29.5 days = 1 rotation

29.5 days = 1 revolution

rev. = rot. → see same
side of moon

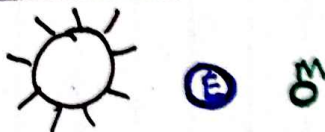
Earth's pull on moon
causes rot./rev. to
sync.

* tidal coupling

What part of moon we
see depends on moon's
position w/ Earth & Sun.

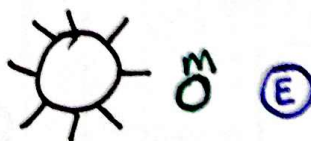
ECLIPSES

Lunar



L = SEM

Solar



S = SME