

Topic: Earth Motions

Aim: Earth Motion #1: ROTATION !

1. Rotation - spinning on an axis

2. Earth takes 24 hours to complete one rotation
(*ESRT* page 15)

3. Earth's rate of rotation = $15^\circ/\text{hour}$
from the west to the east
(counterclockwise from top view)



side view



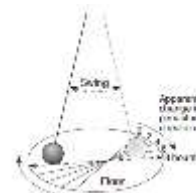
top view



4. causes day and night changes

example: daily rising and setting of the Sun

5. Evidence #1 – Foucault Pendulum
a swinging pendulum appears to
change direction in a predictable manner



6. Evidence #2 – Coriolis Effect
winds/ocean currents
deflect (bend) from
their expected path

Earth Science Reference Tables
Page 4 – Surface Ocean Currents
Page 14 – Planetary Wind and Moisture Belts