

# Movements of the Earth


## Brainstorm

- With your partner come up with a list of changes that you observe for each of the four seasons.




## Movements of the Earth

- The Earth moves in two different ways:
  - Rotation
  - Revolution



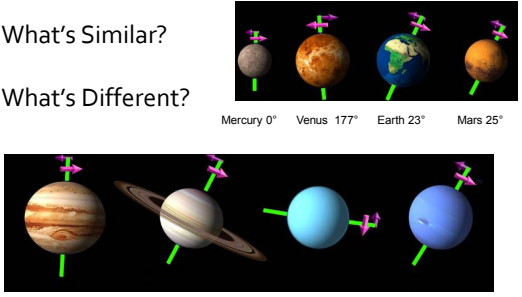
## 1. Rotation

- Earth rotates (spins) on its axis
- Axis has a tilt of 23.5°



## Other Planet's Rotation

- What's Similar?
- What's Different?



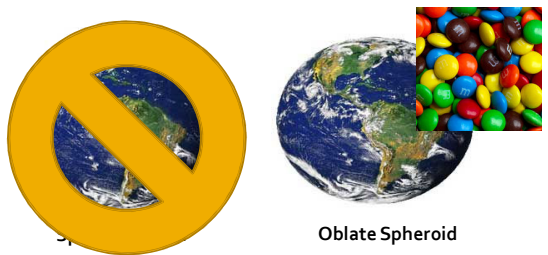
Mercury 0°   Venus 177°   Earth 23°   Mars 25°

Jupiter 3°   Saturn 27°   Uranus 98°   Neptune 30°

NASA images edited by LPI 5

## Earth's Equatorial Bulge

- Rotation of Earth creates an equatorial bulge



Oblate Spheroid

## Earth's Hemispheres

- Earth has four hemispheres: Northern, Southern, Western, and Eastern

Northern Hemisphere  
Southern Hemisphere  
Western Hemisphere  
Eastern Hemisphere

www.visualdictionaryonline.com

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## Sunrises and Sunsets

- Why does the sun rise in the east and set in the west?

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## Earth's Rotation Time

- Earth completes one full rotation in 23 hours and 56 minutes
- Where do we get a 24 hour day from?
- It takes 24 hours for the Sun to return to the same spot in the sky (solar day)

Earth Rotates on its axis.

One complete rotation takes 23 hr 56 min 4.1 sec.

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## 2. Revolution

- Earth revolves around the Sun
- Period of revolution is 365.25 days

<https://www.youtube.com/watch?v=lkWyM-M8o0c>

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## Today's Main Idea

- Earth rotation (spin) is a day and its revolution (orbit) is a year.

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## Homework Question

2. Explore today's main idea with this question: Outside of the classroom, what are examples of rotation and revolution?

### Vocabulary for Next Time

- Seasons
- Equator
- Ecliptic

Helpful Textbook Pages:  
27, 370, 759, Glossary

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