

Section 2

# **THE EARTH AND SPACE**

**OBJECTIVES:**

**UNDERSTAND THE PHYSICAL PROCESSES THAT SHAPE  
EARTH'S SURFACE**

# The Solar System

- Sun = \_\_\_\_\_
- Earth + \_\_\_\_\_ other planets + countless other bodies revolving around the Sun (i.e.: Pluto) = our solar system
- \_\_\_\_\_ times differ- Mercury 88 days, Neptune 165 years

# The Solar System

- Earth's Movement

- \_\_\_\_\_ per \_\_\_\_\_  
(complete circuit around Sun)- 1 year

- Every four years we add up  $\frac{1}{4}$  days-

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- Earth \_\_\_\_\_ (spins) on \_\_\_\_\_ (imaginary line from North to South Pole)- easterly every 24 hours

- Why don't we feel the Earth rotating?

- Atmosphere

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# Sun and Seasons

- Earth tilted \_\_\_\_\_ degrees on its axis
- Causes \_\_\_\_\_
- \_\_\_\_\_ - warmer; \_\_\_\_\_ - cooler

# Sun and Seasons

- Solstices and Equinoxes
  - 4 days in the year are significant for seasons
  - \_\_\_\_\_ - North Pole tilted toward Sun-  
directly over \_\_\_\_\_ (23 ½° N lat.)-  
summer solstice in Northern hemisphere (longest  
day of year)
  - In Southern hemisphere this marks the beginning  
of winter

# Suns and Seasons

- 6 months later- \_\_\_\_\_ - noon sun's rays hit \_\_\_\_\_ - winter solstice in Northern Hemisphere
- \_\_\_\_\_ - midway between solstices- spring and fall- days are equal for both hemispheres
  - \_\_\_\_\_ and \_\_\_\_\_
  - Noon Sun directly over \_\_\_\_\_

# Sun and Seasons

- Effects of Latitude

- - areas near the equator between Tropics of Capricorn and Cancer- get direct sunlight- warm year round
- Around poles, light is always indirect- cold/cool year round
- - seasonal temps vary greatly- air masses move in from Tropics and Poles