

## Reasons for Seasons

Objective: \_\_\_\_\_  
\_\_\_\_\_

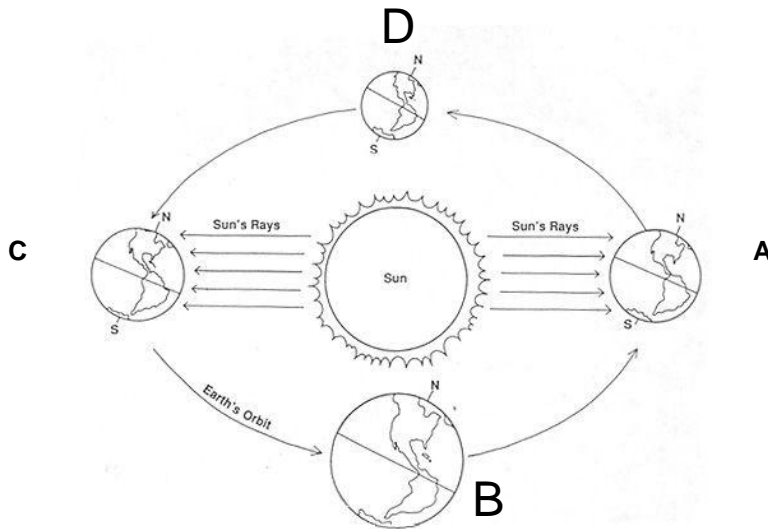
### *Key Concepts:*

- Earth's \_\_\_\_\_ causes the seasons on Earth.
- Earth's axis \_\_\_\_\_ away from perpendicular to the ecliptic plane, which is Earth's orbit around the Sun, by \_\_\_\_\_.
- Currently, Earth's axis \_\_\_\_\_ to the North Star also known as \_\_\_\_\_.
- Earth's \_\_\_\_\_ affects \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_, which causes differences in seasons.
- During the \_\_\_\_\_, the portion of the Earth leans \_\_\_\_\_ the Sun in its \_\_\_\_\_.
- There are more \_\_\_\_\_, and the Sun's angle is more \_\_\_\_\_ than at other times of year.
- \_\_\_\_\_ and more \_\_\_\_\_ sunlight result in more heating.
- During \_\_\_\_\_, the other portion of Earth leans \_\_\_\_\_ from the Sun.
- There are \_\_\_\_\_ daylight hours, and the Sun hits us at an \_\_\_\_\_; this makes it appear \_\_\_\_\_ in the sky.
- There is \_\_\_\_\_ heating because the angled Sun's rays are "\_\_\_\_\_ " rather than direct.
- During the \_\_\_\_\_ and \_\_\_\_\_, the Earth \_\_\_\_\_ neither \_\_\_\_\_ nor \_\_\_\_\_ from the Sun.
- \_\_\_\_\_ and \_\_\_\_\_ hours are \_\_\_\_\_ and temperatures are \_\_\_\_\_.
- Around the \_\_\_\_\_, the \_\_\_\_\_ of days and the \_\_\_\_\_ of sunlight don't change as much.
- The \_\_\_\_\_ you get from the \_\_\_\_\_, the more \_\_\_\_\_ the seasonal changes.

- Because of Earth's \_\_\_\_\_, the Northern Hemisphere always experiences the \_\_\_\_\_ season.
- For example, when the Northern Hemisphere experiences \_\_\_\_\_, the Southern Hemisphere experiences \_\_\_\_\_.

### Reasons for Seasons: Processing:

Using the picture below, answer the following questions about the different seasons the Northern Hemisphere and Southern Hemisphere are going through.



1. In position A, the Southern Hemisphere is receiving more direct sunlight as compared to the Northern Hemisphere. The Southern Hemisphere is in their \_\_\_\_\_ season, and the Northern Hemisphere is in their \_\_\_\_\_ season.
2. In position C, the Northern Hemisphere is receiving more direct sunlight as compared to the Southern Hemisphere. The Northern Hemisphere is in their \_\_\_\_\_ season, and the Southern Hemisphere is in their \_\_\_\_\_ season.
3. In position B, the Northern Hemisphere and Southern Hemisphere receive equals amount of sunlight. At this position, the Sun's rays are starting to move more to the Northern Hemisphere. The Northern Hemisphere is in their \_\_\_\_\_ season, and the Southern Hemisphere is in their \_\_\_\_\_ season.
4. In position D, the Northern Hemisphere and Southern Hemisphere receive equals amount of sunlight. At this position, the Sun's rays are starting to move more to the Southern Hemisphere. The Northern Hemisphere is in their \_\_\_\_\_ season, and the Southern Hemisphere is in their \_\_\_\_\_ season.
5. What line of latitude is the Sun's rays directly pointing at the following positions in Earth's orbit around the Sun?
  - Position A: \_\_\_\_\_

- Position B: \_\_\_\_\_
- Position C: \_\_\_\_\_
- Position D: \_\_\_\_\_