

Season Orbit Cycle

Follow Earth's tilted trip around the Sun.

6.9.A "model and illustrate how the tilted Earth revolves around the Sun, causing changes in seasons; and"

NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

Write one process from the word bank in each numbered arrow box. Follow the arrows to show how Earth moves from one position to the next.

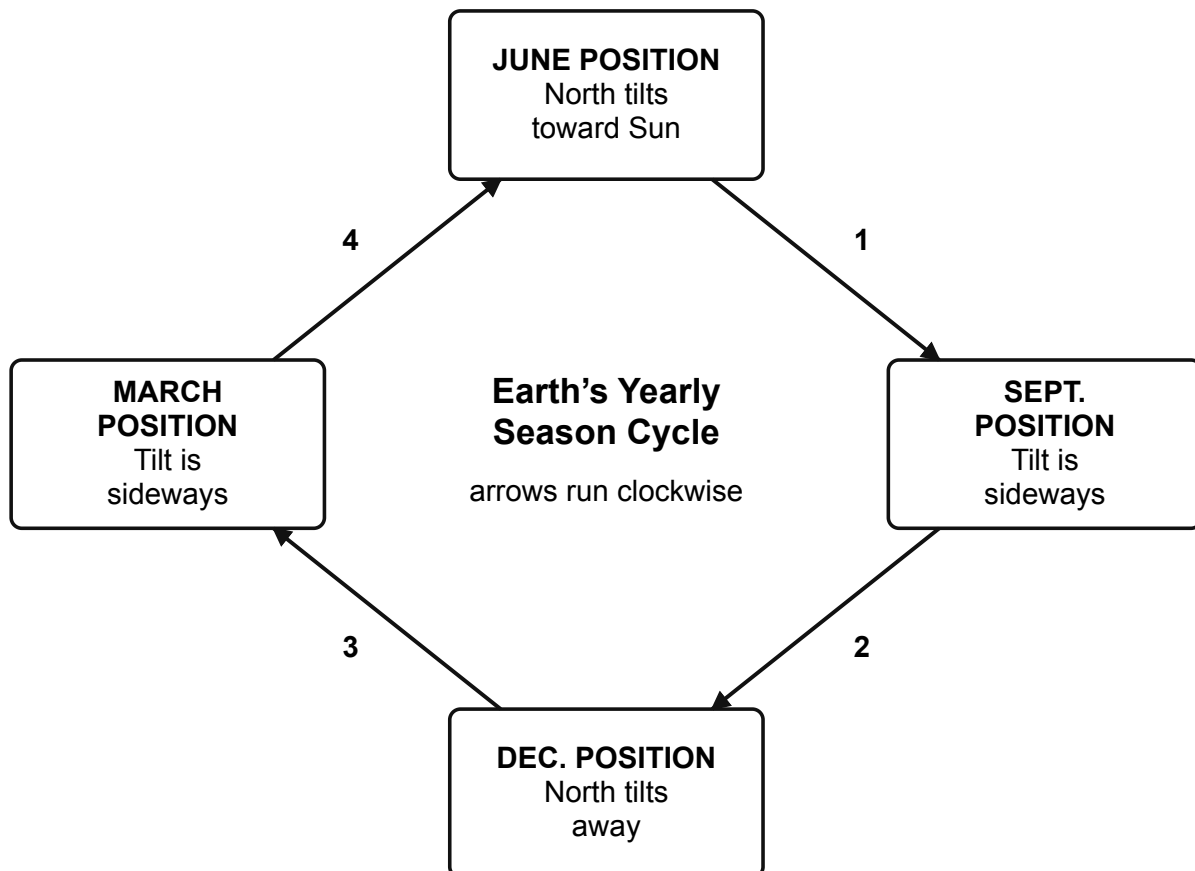
WORD BANK

revolves to December

revolves to June

revolves to March

revolves to September



Arrow numbers match the response boxes on the next student section.

Label the arrows

Use the word bank to write the process for each numbered arrow.

Arrow 1

Arrow 2

Arrow 3

Arrow 4

2 RUN THE MODEL _____ Use your finished diagram

1 At which position is the Northern Hemisphere tilted away from the Sun?

2 Which position comes right after SEPT. POSITION in the cycle?

3 How does the model show why seasons change?



CHECK IT

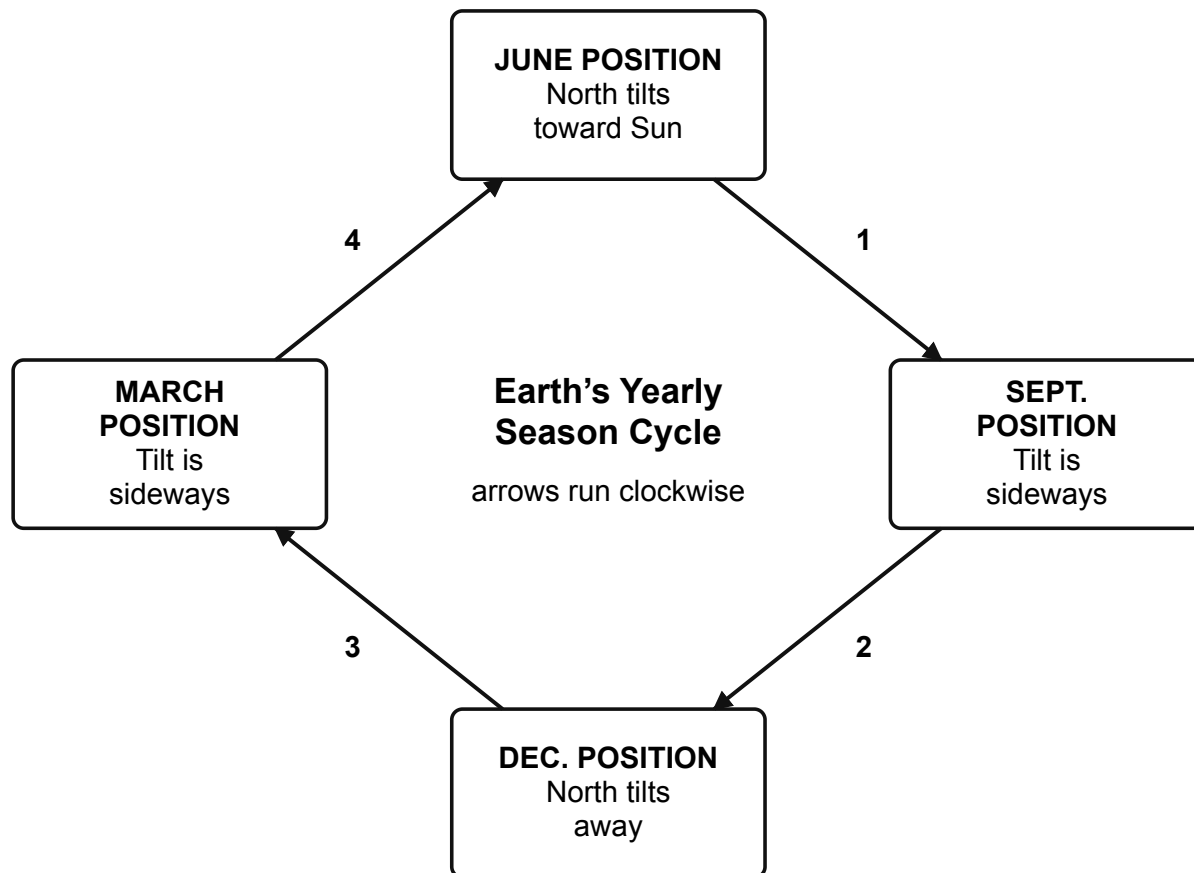
Before you turn it in

- ☐ I wrote a process in every arrow box.
- ☐ I can trace the cycle back to June.
- ☐ I can explain how Earth's tilt changes sunlight.

TEST THE MODEL

What is one detail about real seasons that this model leaves out?

PART 1 • COMPLETED MODEL

**Arrow 1**

revolves to September

Arrow 2

revolves to December

Arrow 3

revolves to March

Arrow 4

revolves to June

PART 2 • RUN THE MODEL

1. **DEC. POSITION** (At which position is the Northern Hemisphere tilted away from the Sun?)
2. **DEC. POSITION** (Which position comes right after SEPT. POSITION in the cycle?)
3. **As Earth revolves, its tilted axis points the Northern Hemisphere toward, sideways to, or away from the Sun.** (How does the model show why seasons change?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out changes in daylight length.
- It does not show that the Southern Hemisphere has opposite seasons.

The arrows show Earth revolving through four positions during one year. Earth's axis stays tilted in the same general direction as Earth revolves, changing which hemisphere receives more direct sunlight.