

Sunlight Season Loop

Trace how Earth's tilt shapes a year.

S6E2.c "Analyze and interpret data to relate the tilt of the Earth to the distribution of sunlight throughout the year and its effect on seasons."

NAME _____

DATE _____

1 LABEL THE MODEL _____ Word bank below

Write one process from the word bank in each numbered arrow box. Follow the arrows around the cycle from stage to stage.

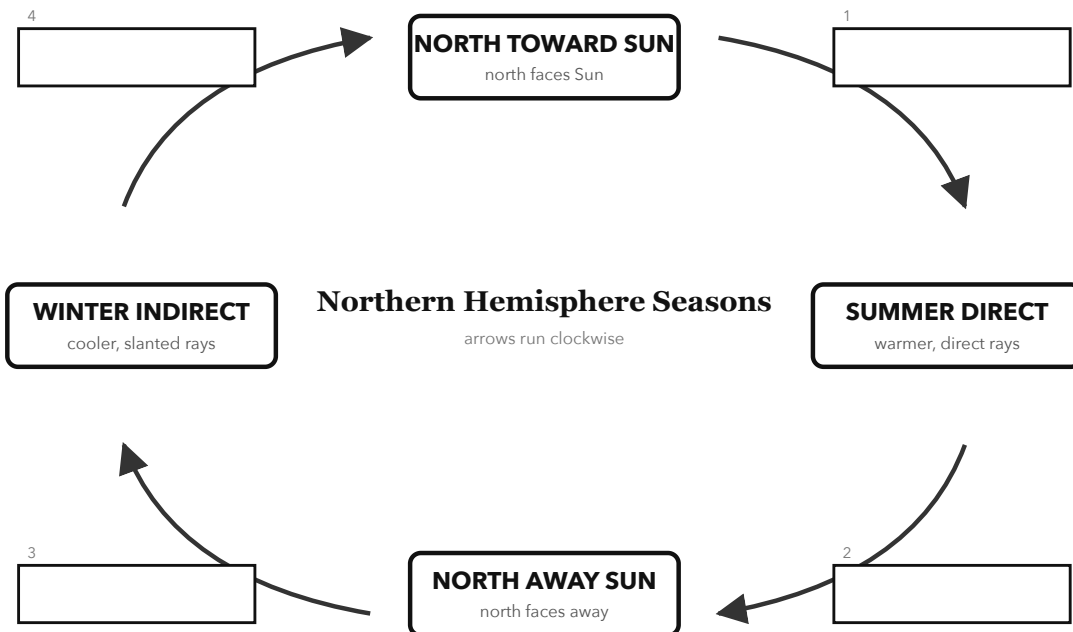
WORD BANK

Earth travels half its orbit

Earth travels next half orbit

Sunlight becomes less direct

Sunlight becomes more direct



2 RUN THE MODEL Use your finished diagram

1 Which process connects NORTH TOWARD SUN to SUMMER DIRECT?

2 How is the sunlight in SUMMER DIRECT different from the sunlight in WINTER INDIRECT?

3 What stage comes right after NORTH AWAY SUN?

3 CHECK IT Before you turn it in

☐ I placed one process on each arrow.

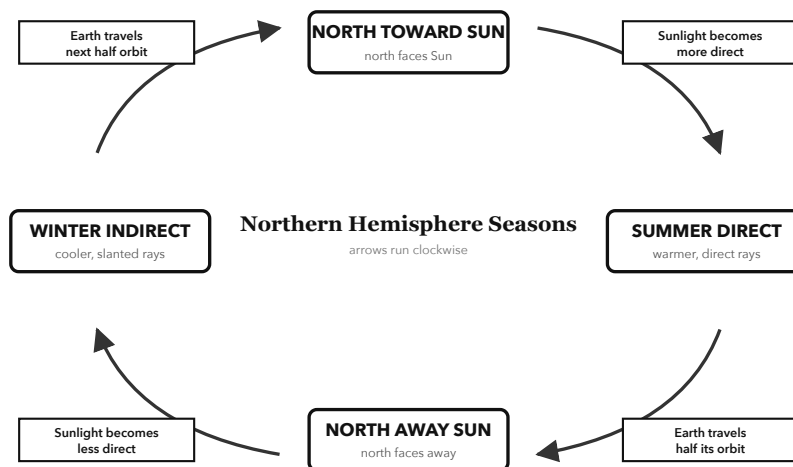
☐ I traced the arrows in cycle order.

☐ I connected Earth's tilt to sunlight and seasons.

TEST THE MODEL

What season or sunlight change does this model leave out?

PART 1 • COMPLETED MODEL



PART 2 • RUN THE MODEL

1. **Sunlight becomes more direct.** (Which process connects NORTH TOWARD SUN to SUMMER DIRECT?)
2. **Summer has more direct sunlight. Winter has less direct, more slanted sunlight.** (How is the sunlight in SUMMER DIRECT different from the sunlight in WINTER INDIRECT?)
3. **WINTER INDIRECT** (What stage comes right after NORTH AWAY SUN?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out spring and fall.
- It leaves out changes in the length of daylight.

The orbit arrows each represent about half of Earth's yearly trip around the Sun. The model simplifies the annual pattern by leaving out spring and fall.