Moon Phase Loop

Track how orbital motion changes Moon phases.

6.3.c "the movement of Earth and the moon in relationship to the sun causes phases of the moon;"

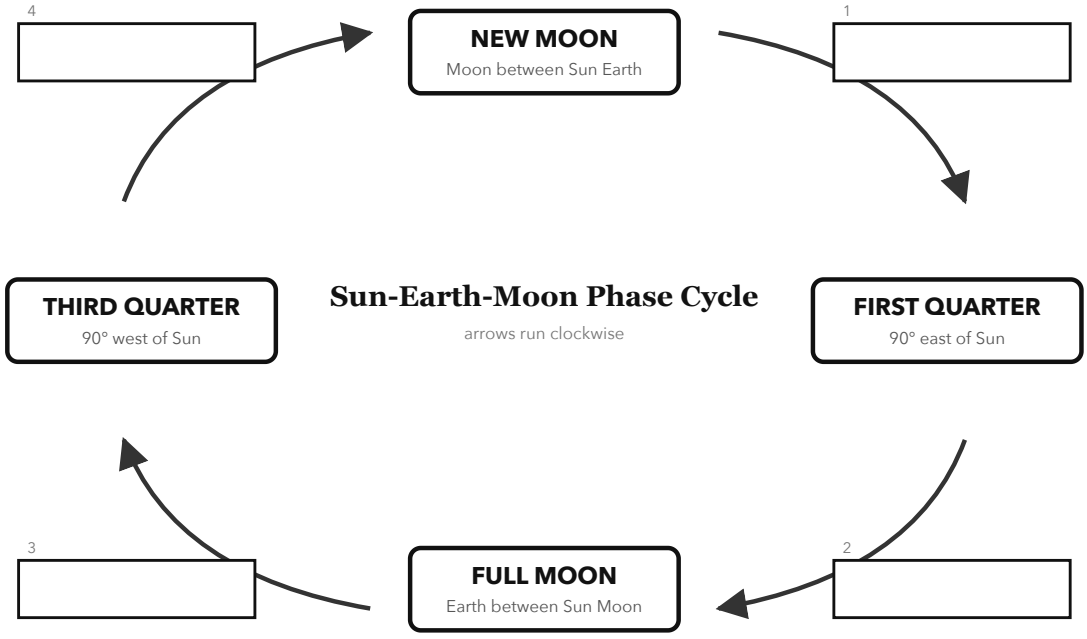
NAME _____ DATE _____

1 LABEL THE MODEL

Word bank below

Write one word-bank process in each numbered arrow box. You may use a process more than once, then follow the arrows to check the loop. Some processes are used more than once.

WORD BANK Moon orbits Earth



2 RUN THE MODEL

Use your finished diagram

1. Which stage follows NEW MOON when you follow the arrows?

2. At which stage is Earth between the Sun and the Moon?

3. Which process belongs in every arrow box?

3 CHECK IT

Before you turn it in

- [ ] I used the same process on each arrow.
- [ ] I can follow the loop from any stage.
- [ ] I can identify the Sun-Earth-Moon positions.

TEST THE MODEL

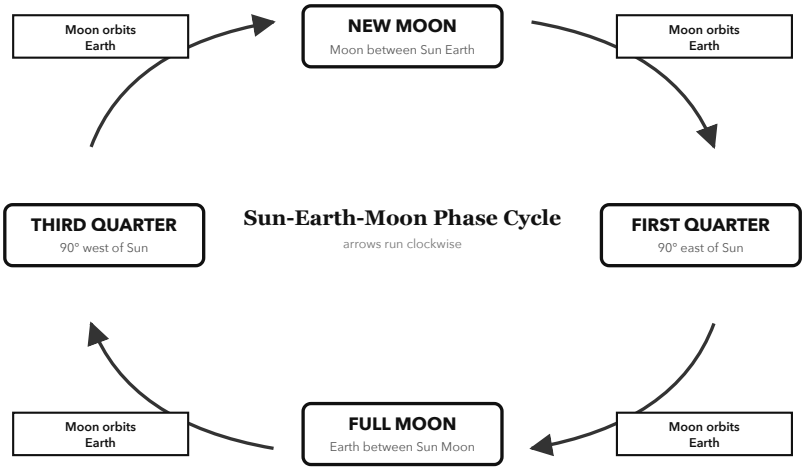
What important part of the real Moon phase system does this four-stage model leave out?

ANSWER KEY

Moon Phase Loop

GRADE 6 · 6.3.c

PART 1 · COMPLETED MODEL



PART 2 · RUN THE MODEL

1. **FIRST QUARTER** (Which stage follows NEW MOON when you follow the arrows?)
2. **FULL MOON** (At which stage is Earth between the Sun and the Moon?)
3. **Moon orbits Earth.** (Which process belongs in every arrow box?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out the crescent and gibbous phases.
- It does not show that the Moon's orbit is tilted.

Use “Moon orbits Earth” in all four arrow boxes. The stage descriptions show the Moon's changing position relative to both Earth and the Sun.