

Moon Motion Loop

Track the Moon's changing position.

S6E2.a "Develop and use a model to demonstrate the phases of the moon by showing the relative positions of the sun, Earth, and moon."

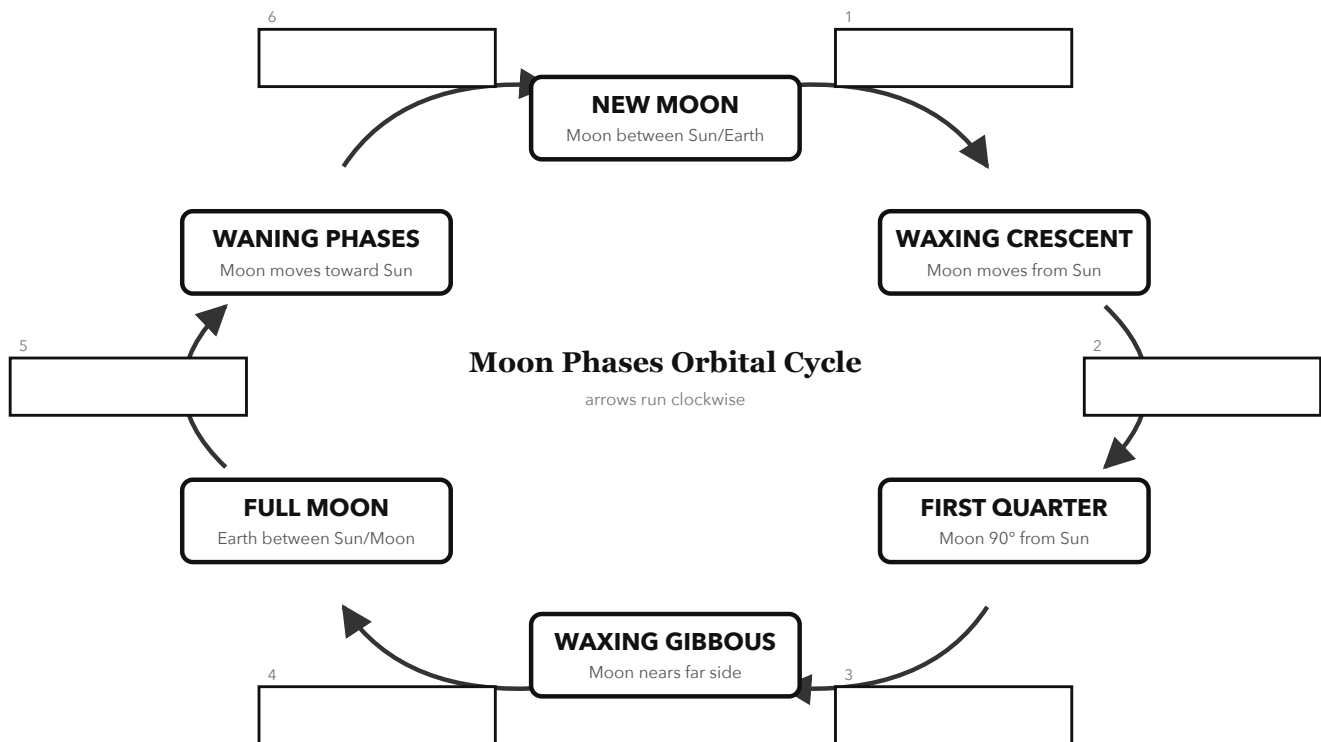
NAME _____ DATE _____

1 LABEL THE MODEL _____ Word bank below

Follow the arrows around the model. Write one word-bank process in each numbered box. Some processes are used more than once.

WORD BANK

Moon orbits Earth



2 RUN THE MODEL Use your finished diagram

1 At which stage is the Moon between the Sun and Earth?

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

3 What repeated process carries the Moon from one stage to the next?

3 CHECK IT Before you turn it in

☐ I placed a process in every box.

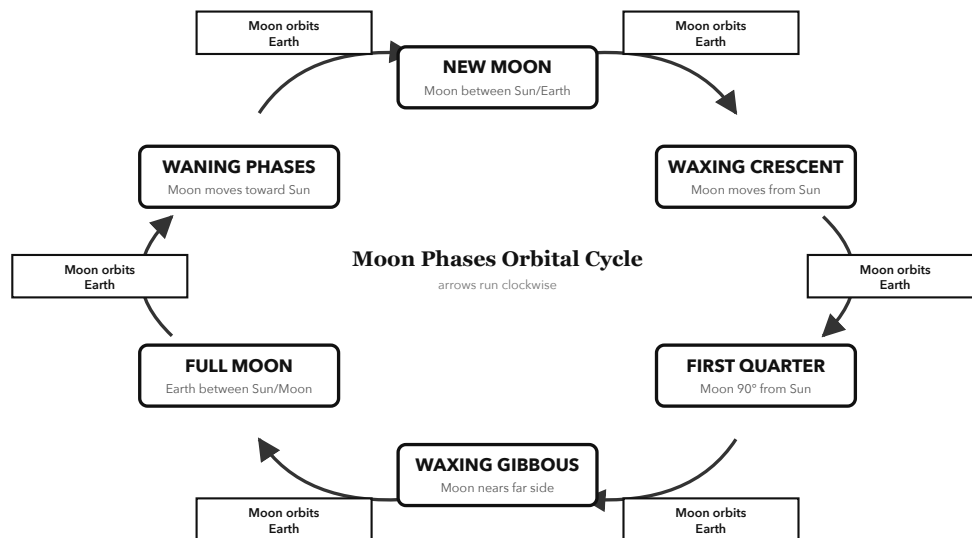
☐ I can find the new moon position.

☐ I can explain why the phases repeat.

TEST THE MODEL

What does this model leave out about the real Moon, Earth, and Sun system?

PART 1 • COMPLETED MODEL



PART 2 • RUN THE MODEL

1. **New moon.** (At which stage is the Moon between the Sun and Earth?)
2. **Full moon.** (At which stage is Earth between the Sun and Moon?)
3. **The Moon orbits Earth.** (What repeated process carries the Moon from one stage to the next?)

TEST THE MODEL (SAMPLE ANSWERS)

- It leaves out the Moon's tilted orbit around Earth.
- It does not show the real sizes and distances of the Sun, Earth, and Moon.

Each numbered arrow should say "Moon orbits Earth." The six stages show broad positions in the repeating phase cycle, not every named moon phase.