Year 4 Science: Day, night and shadows: modelling the Sun and Earth

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. At midday, is your shadow long or short?

2. In the morning in New Zealand, which way do shadows point: towards the east side or the west side?

3. Which half of Earth has daytime?

4. What causes day and night?

5. It is midday in New Zealand. Is it day or night on the opposite side of Earth?

6. In the torch-and-ball model, what does one full turn of the ball stand for?

Fix the mistake

7. Correct this statement: "Night happens because the Sun goes around to the other side of Earth."

8. Correct this statement: "Day and night happen because Earth goes around the Sun."

9. Correct this statement: "Shadows are longest at midday, when the Sun is strongest."

Answer key (for parents and tutors)

1. At midday, is your shadow long or short?
   Short, because the Sun is high.
2. In the morning in New Zealand, which way do shadows point: towards the east side or the west side?
   Towards the west side, away from the morning Sun in the east.
3. Which half of Earth has daytime?
   The half facing the Sun.
4. What causes day and night?
   Earth spinning on its axis.
5. It is midday in New Zealand. Is it day or night on the opposite side of Earth?
   Night.
6. In the torch-and-ball model, what does one full turn of the ball stand for?
   One day.
7. Correct this statement: "Night happens because the Sun goes around to the other side of Earth."
   The Sun does not go around Earth; Earth spins, so our side turns away from the Sun.
8. Correct this statement: "Day and night happen because Earth goes around the Sun."
   Day and night come from Earth's spin every 24 hours; one trip around the Sun takes a whole year.
9. Correct this statement: "Shadows are longest at midday, when the Sun is strongest."
   At midday the Sun is highest in the sky, so shadows are shortest.