## **Dear Earth Detective Answer Key**

- **1. Answer:** Canada has winter in January because the Northern Hemisphere is tilted away from the Sun, so it gets less direct sunlight. In Australia, which is in the Southern Hemisphere, it's summer because it's tilted toward the Sun during that time.
- **2. Answer:** Day and night happen because Earth rotates on its axis. As Earth spins, different parts of the planet face the Sun (day) while others are turned away (night).
- **3. Answer:** Earth is tilted about 23.5 degrees on its axis. This tilt affects how sunlight hits Earth and causes the seasons as Earth orbits the Sun.
- **4. Answer:** We don't feel Earth spinning because it rotates smoothly and constantly. We're moving with it, just like passengers in a smooth car ride.

