

Name _____

Solar Flares & Earth's Magnetosphere Answer Key

1. Effect: A wave of radiation and particles is launched into space.
2. Effect: The particles race across space and reach Earth in 1-3 days.
3. Effect: The magnetosphere blocks and bends many particles, but some enter.
4. Effect: Disturbances create geomagnetic storms.
5. Effect: Auroras (Northern and Southern Lights) appear in the sky.
6. Effect: Satellites may be damaged, GPS signals disrupted, and power grids can fail.

Extension Challenge

Answers will vary. Example: *A positive effect of solar flares is the creation of beautiful auroras in the night sky. A negative effect is that they can disrupt communication systems and even cause power outages.*