

# 5th Grade Science SOLs

## Study Guides & Review Worksheets

### Sources of Energy

#### Nonrenewable Energy

Nonrenewable energy resources are natural resources that cannot be replaced after they are used because they take millions of years to form.

##### Examples

Fossil fuels are formed from the remains of ancient plants and animals.

Fossil fuels include:



Petroleum (oil)



Coal



Natural Gas

#### Air Pollution



#### Water Pollution



#### Conservation

Conservation is the careful use and protection of energy resources. It means using resources in a way that conserves them.

- Turn off lights and electronics when leaving a room.
- Use energy-efficient light bulbs.
- Use energy-efficient appliances.
- Use energy-efficient devices.
- Use natural light.

- Take short showers.
- Recycle paper and other materials.
- Use energy-efficient light bulbs.
- Use energy-efficient appliances.
- Use energy-efficient devices.

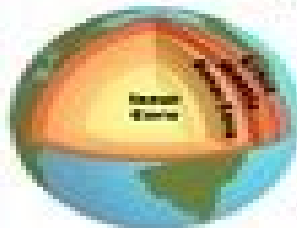
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### Geology

#### Terms to Know

- Erosion:** The breaking down and changing of rocks and minerals due to natural processes.
- Strata:** The process of soil, rocks, and other sediments being carried away or moved by natural forces, such as wind, water, and ice.
- Deposition:** When lots of soil, rocks, and other sediments settle in a new place.

#### Layers of the Earth



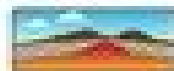
The Earth has layers. Pressure and temperature increase the deeper you go below the Earth's surface.

- Crust:** The thin, outermost layer of the Earth. It is composed of solid rock.
- Mantle:** The largest layer that is between the crust and the outer core. It is made of hot, semi-solid rock.
- Outer Core:** The liquid layer surrounding the inner core.
- Inner Core:** A solid sphere at the center of the Earth. It is made of materials such as iron and nickel.

#### Earth's Movements

##### Divergent Boundaries

- Plates move apart from each other.
- Results in volcanoes and seafloor formation.



##### Convergent Boundaries

- Plates move toward each other.
- Results in earthquakes and mountain formation.



##### Transform Boundaries

- Plates slide past each other.
- Results in earthquakes.



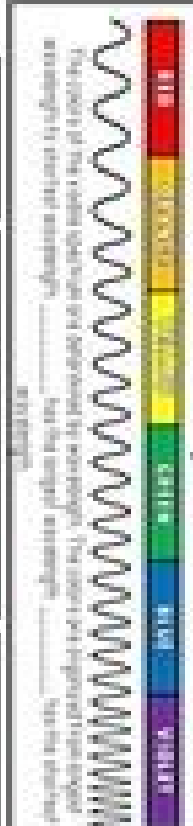
#### Thermal Energy

Earth's thermal energy causes movement within the Earth. It causes currents in the mantle that move the Earth's tectonic plates. This plate movement can result in earthquakes, volcanoes, and mountain formation.

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### The Visible Spectrum



# Grade 5 Science Study Guide

**Brendan G. Carr**



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