Heat and Temperature Practice Quiz
Topic 7 - Sources of Thermal Energy

1. Much of the energy used in Alberta is found in the vast resources of fossil fuels. This type of energy source is useful and is stored until we need it. Fossil fuels are considered to be sources of ...

- ○ **chemical energy**
- ○ **industrial energy**
- ○ **biological energy**
- ○ **geothermal energy**

2. Electrical energy can be generated at a Dam, using generators and can also be generated by thermo-electric generating stations which burn coal. The reason that thermo-generating stations are used is because ...

- ○ **coal is so abundant**
- ○ **it is cleaner and cheaper**
- ○ **a large waterfall is not available**
- ○ **heated water is more efficient**

3. Thermal energy from inside the Earth's crust can be harnessed as a useful thermal energy source. Volcanoes, hot springs and geysers are example of this type of thermal energy source. This type of thermal energy is ...

- ○ **an environmental pollutant**
- ○ **a clean alternative to using fossil fuels**
- ○ **called geovolcanic energy**

- ○ **used to generate fossil fuel resources**

4. Solar energy can be a very good alternative thermal energy source. The way a house is situated on the lot it is built on is a passive solar energy technique. This technique is important because the sun is not always ...

- ○ **shining**
- ○ **in the same direction**
- ○ **on the same plane**
- ○ **providing EMR**

5. Co-generation is the use of ...

- ○ **electrical energy to get waste energy**
- ○ **waste energy to generate electrical energy**
- ○ **waste energy to generate mechanical energy**
- ○ **mechanical energy to generate waste energy**

Answers

Heat and Temperature Practice Quiz
Topic 7 - Sources of Thermal Energy

1. Much of the energy used in Alberta is found in the vast resources of fossil fuels. This type of energy source is useful and is stored until we need it. Fossil fuels are considered to be sources of ...

- ◉ **chemical energy (Text p. 239) Coal is a fossil fuel - containing stored chemical energy that needs no further treatment to produce thermal energy as it burns**
- ○ **industrial energy**
- ○ **biological energy**
- ○ **geothermal energy**

2. Electrical energy can be generated at a Dam, using generators and can also be generated by thermo-electric generating stations which burn coal. The reason that thermo-generating stations are used is because ...

- ○ **coal is so abundant**
- ○ **it is cleaner and cheaper**
- ◉ **a large waterfall is not available (Text p. 240) Where large waterfalls or good locations for dams do not exist, thermo-electric generating stations are common**
- ○ **heated water is more efficient**

3. Thermal energy from inside the Earth's crust can be harnessed as a useful thermal energy source. Volcanoes, hot springs and geysers are example of this type of thermal energy source. This type of thermal energy is ...

- ○ **an environmental pollutant**
- ◉ **a clean alternative to using fossil fuels (Text p. 241) Geothermal energy is clean, and the power plants that convert it to electrical energy are reliable**
- ○ **called geovolcanic energy**

- ○ **used to generate fossil fuel resources**

4. Solar energy can be a very good alternative thermal energy source. The way a house is situated on the lot it is built on is a passive solar energy technique. This technique is important because the sun is not always ...

- ○ **shining**
- ○ **in the same direction**
- ◉ **on the same plane (You will find this in the supplementary notes on solar energy) Passive Solar Energy**
- ○ **providing EMR**

5. Co-generation is the use of ...

- ○ **electrical energy to get waste energy**
- ◉ **waste energy to generate electrical energy (Text p. 247) Cogeneration uses waste energy to generate electricity**
- ○ **waste energy to generate mechanical energy**
- ○ **mechanical energy to generate waste energy**