Fire Triangle Worksheet

1. Fires need heat, fuel, and oxygen to burn. This is known as the “fire triangle.” Draw a triangle below and label each of the 3 sides with the word and a picture for each of the three parts.

2. Initially, the heat is provided by an ignition source, which can be human or natural. Name 2 natural and 2 human-caused sources of heat for fire ignition.

3. Fires need fuel to burn. Name 3 potential fuels you might expect to find in a forest.

4. Oxygen is available in the air. Weather has a great influence on when fires occur and on how they spread. Hot temperatures and dry winds can create severe fire conditions by affecting fuel, moisture, and oxygen. What can dry winds do to fuels to make them more likely to burn?

5. If you cut off any one of the three elements- heat, fuel, and oxygen- a fire will not burn. What are some ways that firefighters might cut off each of the three parts of the fire triangle?

6. Is fire good or bad for a forest? What information do you have to support your opinion? How might you design a scientific experiment to test if a fire has degraded or benefitted a forest?