Guided Reading Chapter 14 Section 2

1. _____ reactions occur when two or more substances are combined to form a new compound.

2. A special type of addition reaction that creates polymers is called _____.

3. A _____ reaction breaks down compounds into two or more smaller compounds.

   a) addition b) single displacement c) decomposition

4. In decomposition reactions, _____ is required to begin the reaction.

5. What happens in a single displacement reaction?

6. What happens in a double displacement reaction?

7. In one type of combustion reaction, _____ is combined with oxygen to create heat and light.

   a) nitrogen b) carbon c) hydrogen

8. Complete the following table to review the different types of reactions.

Reaction	General Equation	Example
Addition		$2H_2O + O_2 \longrightarrow 2H_2O$
	$AB \longrightarrow A + B$	
	$AX + B \longrightarrow BX + A$	
Double Displacement		$Pb(NO_3)_2 + 2KI \longrightarrow PbI_2 + 2KNO_3$
	Carbon compound + $O_2 \longrightarrow CO_2 + H_2O$	

9. Draw Figure 14.15 to compare several types of carbon compounds.

10. Write the reaction that would occur in cars of the future. What is the final product?