

# Rolling Through Reactions: Worksheet

\_\_\_\_\_

Name

\_\_\_\_\_

Class

1. Identify the hydrocarbon that was assigned by your teacher.

a) Name: \_\_\_\_\_ b) Chemical formula: \_\_\_\_\_

c) Structural formula:

Refine the hydrocarbon using the following reactions. Role the dice to represent the hydrocarbon that will allow you to complete the questions below. For example, if you roll a 6 the hydrocarbon represented will contain 6 carbons = hexane.

2. Your compound undergoes a cracking reaction with the alkane represented by the dice (roll 1).



3. Demonstrate a reforming reaction between product 1 and the alkane represented by the dice (roll 2).



4. Demonstrate a combustion reaction using the hydrocarbon from roll 1. (Don't forget to balance.)



5. Demonstrate a substitution reaction between product 2 and Br<sub>2</sub>



Congratulations, you have refined your hydrocarbon! You completed all four hydrocarbon reactions and made six different products.

