

Name: _____ Date: _____

Wheel Types Activity Worksheet

In this activity, we will test how your robot functions using different types of wheels. To complete this activity, you'll need more wheels than are included in your kit, so either ask your teacher if they have extra wheels or partner with another group. Once you have enough wheels, you may begin the activity.

First, let's test how your robot functions using only stealth wheels. Replace all four wheels on your robot with stealth wheels and try driving it around. Keep a close eye on your robot and observe how it behaves. Record your findings in the space provided.

Now let's test how your robot functions using only omni wheels. Replace all four wheels on your robot with omni wheels and try driving it again. Don't forget to watch how your robot behaves. Record your observations in the space provided.

Optional: If you'd like to test how your robot functions using only compliant wheels, replace all four wheels on your robot with compliant wheels, then try driving it around. As always, take note as to how your robot behaves. Record your observations in the space provided.

Now that you've tested how your robot functions using different types of wheels, use your observations to help answer the following questions:

1. Which wheels seemed to be made for driving in a straight line? Why?

2. Which wheels experienced difficulty turning? Why do you think this is?

3. Were there any wheels that had trouble supporting the weight of your robot?

4. How might driving on different surfaces impact the performance of your wheels?

5. What combination of wheels do you think would give your robot the greatest functionality? Explain why you think this.