Name: Date:

Week 10 – Puff Mobile

Materials:	Amount:
Lifesavers	4
Straws	5
Index Cards	4
Tape	1 roll

Procedure: *BY NOW, YOU SHOULD KNOW TEAMWORK GETS THINGS DONE BETTER AND FASTER! BE POLITE AND LISTEN TO YOUR TEAMMATES WHEN YOU WORK TOGETHER!*

1. *Listen to the SCouts review some ideas you learned already from physics.*
2. *Ask: Listen for a few tips on how to build a puff mobile. Your goal is to build a puff mobile that travels the farthest.*
3. *Imagine and Plan: Talk with your teammates on how your group will build your puff mobile. On the back of the worksheet, draw what your car will look like.*
4. *Create: Build your car with your teammates. When testing, have someone blow on the car's sail with SCouts watching the track.*
5. *Improve: After seeing how far your puff mobile went, try to improve your car so it goes farther.*

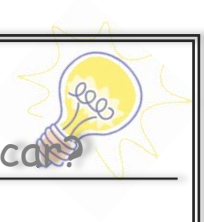
Energy in the Wind

Way back in our Marshmallow Catapults experiment, we learned that **moving things** have **kinetic energy**. **Wind** is simply the **movement of air** on a big scale, so it has **kinetic energy**. Since **energy** is the **ability to do work**, it is possible to have the wind do work for us. People have used sailboats since ancient times to travel across the sea. Nowadays, you can find wind turbines out in the desert which makes electricity from the wind. Today, you will be building a **puff mobile** which is a small car with a sail that will use wind (your breath) to move!

Question 1: Review ideas from physics with the SCouts. Which part of your puff mobile should you be blowing the most? (Hint: Which part of your puff mobile gets the most energy from your breath?)

Question 2: Using good manners and listening skills, talk with your team on how to build the puff mobile. Draw what your puff mobile will look like in the space below.

Bonus Question: Think like an engineer!



How far did your puff mobile go? What can you do to improve your car?