

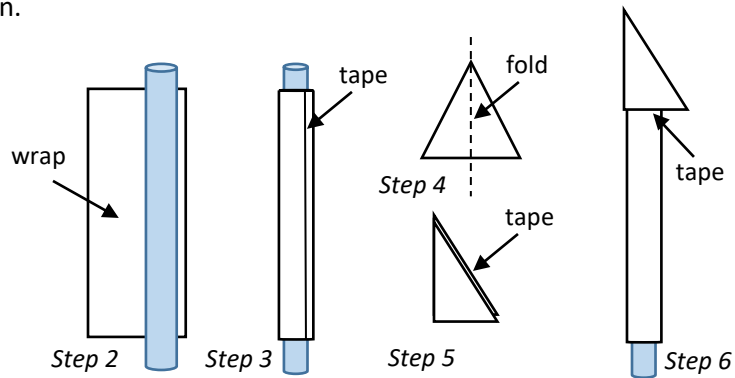
## Make your own: Straw Rocket

Ready for some pocket rocket science? Rockets require a great deal of force to leave our atmosphere. A **force** is a push or a pull, and when big enough can cause an object to move in a particular direction. The bigger (more massive) the object, the more force you need to move it. The more force you use, the faster the object will change direction. We can state this simply as  $F=ma$ , or Force = mass x acceleration, otherwise known as the 1<sup>st</sup> Law of Motion.

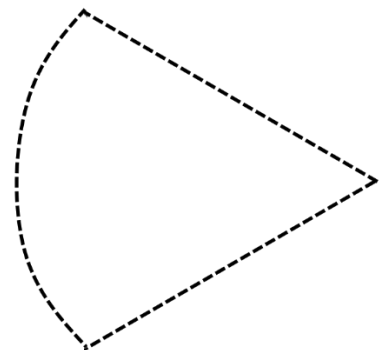
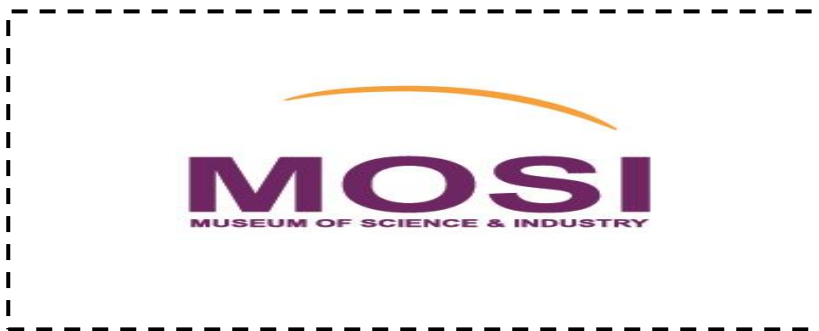
### Supplies:

- Rocket Template (below)
- (1) straw
- Scissors
- Tape
- Crayons/marker/etc.

### Instructions:



1. Cut out the rectangle and the triangle from the template below. The square will be the body of your rocket and the triangle will be the nose
2. Wrap the rectangle tightly around your straw long-ways
3. Tape the seam of your rectangle closed completely so that no air can escape from the side of
4. Fold your triangle in half (like a big piece of pizza)
5. Tape the long edge of your triangle closed completely so no air can escape from the side
6. Place your nose cone on top of the body of your rocket and tape it closed completely
7. Shoot your rocket by blowing into the bottom of the straw!



Check out our video: *MOSI Bottle Rockets* for a more advanced rocket activity you can try at home!

