Force and Motion Activities
5th Grade

Activity Helper Tasks:

- Students will complete each activity with a partner.
- The presentation will be done inside, but the activity should be done on the grassy area near the NEST outdoor classroom as long as the weather allows.
- It is recommended the leader demonstrate the steps first BEFORE students begin.

Activity One: Balloon Rockets

In teams of two, students create balloon rockets.

Supplies per Teams of Two

- String – (collect 72" string for re-use)
- Straw – (collect wide straws for re-use)
- Tape – two 3" strips (volunteer assist when team is ready)
- Balloon – 12 inch diameter size



Steps

1) Thread the string through the straw.
2) Blow up the balloon. (No germs! **One teammate blows every time**)
3) PINCH the end – do NOT tie.
4) Hold balloon under the straw.
5) Put two pieces of tape across the straw onto the balloon.
6) Hold the pinched end at the end of the string.
7) Each person holds one end of the string and stands far apart.
8) Let go of balloon and watch it fly!

Activity Two: Marshmallow Shooters

Teams of two create marshmallow shooters.

Supplies per Teams of Two

- Balloon – 12 inch diameter size
- Cup (collect cups for future classes)
- 2-3 mini marshmallows



Steps

DONE IN CLASSROOM:

1) Fold the balloon in half longways.

2) Cut about ¼ off the top of the balloon.

DONE OUTSIDE:

3) Tie the end of the balloon.

4) Stretch the balloon over the LIP of the cup (not the cut end).

5) Place a marshmallow inside the cup. (Tip: inside the tied hole launches farthest)

6) Pull back on the balloon to launch it!

Please collect plastic cups, straws and string for re-use. Students do not take them home.

Note: Please place all supplies back in the appropriate bag/box, along with the presentation and activity sheet and return the session supplies to the teacher workroom. Thank you!