Recommended Materials

The following materials are required to complete this challenge. The quantity will depend on the number of students participating. Alternatives and additional materials can be used if desired, but be mindful of safety when allowing students to bring in or handle materials that could potentially be dangerous.

Each team will require the following items:

- Vacuum pump
- Marshmallows or balloons (may or may not be filled with water)
- Digital scale or balance
- Measuring tape
- Rulers
- Grid paper

Figure 7. Household supplies that could be used as construction materials for the challenge.

Examples of additional materials that may be used:

- Aluminum foil
- Balloons
- Binder clips
- Bubble wrap
- Cardboard or cardstock
- Cloth
- Clothespins
- Coffee filters
- Cotton balls
- Craft sticks or tongue depressors
- Glue sticks
- Mini aluminum foil pie pans
- Modeling clay
- Paper bags
- Paper clips
- Paper towel or toilet paper tubes (empty)
- Pennies
- Plastic eggs
- Plastic wrap
- Rubber bands
- Skewers or stirrers
- Staplers and staples
- Straws
- String
- Tape (masking, electrical, transparent, and duct)