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:

- Shoebox, including lid
- Yard or meter stick
- Tape measure, at least 8 m (or 25 ft) long
- Cardboard
- Sample rib templates
- Heavy-duty scissors
- Writing utensils
- Pennies, washers, or other objects to use as counterweights
- Scale

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

Examples of additional materials that may be used:

- Cardstock
- Craft sticks, lollipop sticks, or tongue depressors
- Dowel rods (various sizes)
- Glue
- Heavy-duty aluminum foil
- Magnifying lenses and mirrors
- Manila folders
- Paper (copier, construction, and waxed)
- Paper bags
- Plastic wrap (clear and colored)
- Polystyrene cups
- Poster board
- Rubber bands
- Skewers
- Staplers and staples
- Tape (packing, duct, masking, and transparent)