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## Recommended Materials

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The following equipment and building 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:

- Digital scale or balance
- Measuring tape that includes metric units
- Rulers that include metric units
- Mailing tube, oatmeal canister, or small coffee can (simulated rocket for meeting size constraint)
- 2 plastic people figures, 3 to 7 centimeters tall (e.g., Lego® or Playmobil®)
- Grid paper



*Figure 5. Household supplies that could be used as construction materials for the challenge.*

Examples of additional building materials that may be used:

- 16-ounce clear drinking cups
- 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
- Pipe cleaners
- Plastic wrap (clear and colored)
- Polystyrene cups
- Poster board
- Rubber bands
- Skewers
- Staplers and staples
- Tape (packing, duct, masking, and transparent)
- Yarn