

Name:

Date:

Class:

The Power in Prosthetics - Planning and Materials Worksheet

Your Task:

Design and build a functional prosthetic hand with moveable parts. Your prototype should be able to pick up three different items: one small, empty Styrofoam cup, one large foam die, and one whiteboard eraser.

Materials (Check off after each item is gathered.)

- | | |
|---|--|
| <ul style="list-style-type: none"><input type="radio"/> pre-cut hand tracings - (choose cardboard, cardstock, or construction paper)<input type="radio"/> 4 pieces of masking tape<input type="radio"/> scissors<input type="radio"/> whiteboard eraser<input type="radio"/> ruler (optional)<input type="radio"/> glue (optional)<input type="radio"/> thread (optional) | <ul style="list-style-type: none"><input type="radio"/> 5 small colored drinking straws<input type="radio"/> large straw<input type="radio"/> small Styrofoam cup<input type="radio"/> large foam die<input type="radio"/> notebook (or notebook paper)<input type="radio"/> pencils<input type="radio"/> 5 pieces of twine string<input type="radio"/> latex glove |
|---|--|

Constraints

- You **MUST** plan for your prototype (worksheet) and show to the teacher **BEFORE** collecting your materials.
You **MUST** keep track of your used materials by checking them off on the planning worksheet **OR** recording them in your notebooks.
- You **MUST** record your observations in your notebooks.
- For the hand portion of your prototype, you may choose cardboard, card stock, **OR** construction paper (cannot choose more than one).
- You can only use the selected amount of materials listed (For example, you **CANNOT** use more than 4 pieces of masking tape).
- Materials that are listed as "optional" will be used as needed (cannot use an extreme amount).

Begin your plan on the back of this paper. Remember to draw AND label your prototype!

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Draw and Label Your Design