# *Student Worksheet, Day 1 of 4*

**Pre-Reading** - Think of a device, what material is it made of? Why do you think designers have chosen that material for that specific product?

# *Student Worksheet, Day 1 of 4*

# Read the article “Materials Selection versus Manufacturing Process” and review vocabulary. Mark the portions of the article with “M” if the text is describing a specific material. Mark “P” if the text is describing a process or technique. Mark “E” if the text is describing an engineering skill or ability.

**Post Reading – Using Textual Evidence**

1. What are the typical groups for materials?
2. What consideration regarding polymers do manufacturers have to take into account today?
3. What is a good example of how solving engineering problems requires improved materials and equipment?

**Student Worksheet -Directed Note-Taking, *Days 3 and 4***

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| **“Materials Selection”**  **Article: ... Materials Selection versus Manufacturing Process** | | | | | | |
| **Guiding Question**: According to the text and your tour, how do materials used affect the manufacturing process? | | | | | | |
| **\***Paragraph Number | Evidence from Tour (check box) | Write your notes from your reading and tour in the rows below, check the appropriate boxes based on the type of observation you make. | Material Types | Manufacturing Processes | Engineering Skills | Material Properties |
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***Student Worksheet, Day 4 of 4***

**Directions:** Write your answer to the question using information you learned from the article, in your discussion and on your tour. Be sure to use information from the text to justify your answer. Be sure to use complete sentences and correct punctuation and grammar.

**Reflection:** How do the materials used to create a product affect the manufacturing process to create that product?

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