

Engineering and Design Process

Engineering and Design Process, Part A

Ask!	<i>What is the problem you are trying to solve?</i>
Think!	<i>What are some possible solutions? Brainstorm your ideas here.</i>
Plan!	<i>Plan a design and create a drawing that includes all materials you may need. How will you measure the success of your device?</i>

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Engineering and Design Process, Part B

Now, if possible, build your device and complete the next components of the graphic organizer, or record your ideas in another method of your choice.

Build!	<i>Build your first prototype of your device.</i>
Test and rebuild!	<i>Test your device by running water through it. Record your observations. What changes do you need to make? Why?</i>

Based on your plan and design, do you think your device will solve the problem? Complete the last component of the Engineering and Design Process to ask, share, and reflect! Use the graphic organizer below or record your ideas in another method of your choice.

Ask!	<i>Does this solve the problem?</i>
Share!	<i>Share your device with others in a method of your choice.</i>

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Engineering and Design Process, Part C

1. What materials did you select for your filtration device? Why do you think these materials would be the most effective?
2. How would you measure the success of your filtration device? (Hint: How would you know if it worked?)
3. What challenges do you think (or did you) you'd encounter during the design process?
4. What would you do differently next time? Why?