## **PROTOTYPING:** Test assumptions and hypotheses with simple designs (pg.1) MITRE | Innovation Toolkit

How might we \_\_\_\_\_\_ so that \_\_\_\_\_ ?

List requirements	Sketch mind	l map
What does my product need to achieve?	What are ideas of features that could achieve our requirements? For each idea expand another level – what are different ways of approaching that feature?	
	Looks Like	Works Like
Crooto vicion board		
What are current solutions to above requirements? What makes them not work for our case? Can an existing design be used in a way that hasn't been implemented before? (Be aware of patented technology!)		

## **PROTOTYPING:** Test assumptions and hypotheses with simple designs (pg.2) MITRE | Innovation Toolkit

How might we _	
so that	?

Combine sketches	Create paper/cardboard prototype	
Combine aspects from mind map to explore ideas for a fuller product.	<ul> <li>Materials to consider:</li> <li>Cardstock (manila folders, index cards, etc.)</li> <li>Cardboard</li> <li>Legos</li> <li>Paper clips (keep them as clips or use them like bendable wire)</li> <li>Pipe cleaners</li> <li>Tape</li> <li>Chopsticks/popsicle sticks</li> <li>Prompts:</li> <li>How big or small should this be?</li> <li>What shape should this be?</li> <li>How will someone interact with it (look at it, hold it, push it, etc.)?</li> <li>Are there any moving parts?</li> <li>Are there multiple parts? How do they fit together?</li> <li>What is most likely to break?</li> <li>If this a service or a large human-scale prototype, consider ITK's Bodystorming Tool.</li> </ul> Tools to consider: <ul> <li>Cardboard knife</li> <li>Scissors</li> <li>Pliers</li> </ul>	
Choose what to prototype	Collect feedback and make changes	
Identify features of favorite sketches that have high risk and need to be explored more.  Try returning to sketches from the Mind Map and identifying features that need prototyping.  Note that a prototype does not have to be of the full product.	Questions to consider:  1. Do the features in the prototype address the requirements?  2. What works and what doesn't work?  3. Are there any unforeseen design conflicts?  4. What would happen if someone who knows nothing about this tried to use it?  5. How will this be made?  6. What is memorable about this design?  Iterate:  1. What did we accomplish?  2. What will we change?  3. What will we try next?	