

CONTEST OF CHAMPIONS

TASK #4: ENGINEER A NEW TOOL

Purpose:	Use your creativity, engineering, and artistic skills and imagine how we might meet the needs of people for an extended time in space.
Steps:	<ul style="list-style-type: none">• Think about the kinds of jobs people in a space station might need to do.• Identify one job that seems really interesting and brainstorm a tool that would be helpful for that job.• Design what that tool might look like.• Build a working prototype using cardboard, foam board, craft sticks, 3d printers, etc.• Be prepared to explain what the tool does and how it works.
Tips:	<ul style="list-style-type: none">• Plan on building multiple versions of your tool and to make it better each time.• Use Tinkercad.com to make a 3d model of your tool.• Show your invention to others and ask for suggestions.

Parent Corner:

1. The Orem Library Makerspace might be a good resource for this (<https://www.oremlibrary.org/oremlibrary-makerspace/>)
2. Provide extra supervision if the children will be working with sharp edges or hot surfaces
3. Help make sure everyone on the team contributes to the project.
4. They will need to show off their invention later so keep it in a safe place until the team gets to Task #7.