Chapter 10 Design Tools

Design Tool 10.1: Prior Knowledge Needs

Directions for teachers: Use this list to think through the prior knowledge your students will need to help them be successful in working on their upcoming STEM project, and to plan how they can gain that knowledge. In the space below, add any additional knowledge they will need specific to the project you will lead.

What prior knowledge do the students need for this project?

1   **What do students need to know about STEM?**

2   **What do they need to know about the EDP?**

3   **What math and science content and skills do they need?**

4   **What teams are they on and why are they teaming?**

5   **What materials and know-how do they need for building prototypes?**

6   **What technology skills and equipment do they need?**

7   **Do they understand how to carefully test their prototype to see if it meets the criteria? Are they able to accurately collect and analyze their test data?**

Other: