Grade Level: 1st

Topic Addressed: Engineering, Technology, and Applications of Science

Tools Needed: PC (1 per group), Rocketbook (1 per student), Tool School by Joan Holub

Standards Used: 1-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

Instruction:

Minutes	Instruction (Synopsis)
40	I will begin by reading "Tool School" by Joan Holub to the students. It is a book about working together to get things done. I will then split the students into groups of 2 to work together. They will use the PC to research different tools and how the tools work. For example, a hammer has a weighted "head" to drive nails into wood or other materials, and the backend of the "head" where it splits is to get nails out. The students can work together to choose any tool they wish, as long as they can explain how the shape of the object helps it function to solve a given problem. They will get 8 minutes to research and choose a tool. Next the students will still work together, but individually draw a picture of the said tool in their Rocketbooks. They need to draw a picture, as well as a short description about how the shape of the tool helps it function. They will get 5 minutes to do this. Each group will then get about a minute to present their tool to the class, and explain how it functions and what it can be used for.