

## 04/30/08- Lesson Plan: Sanding Machines

**Activity:** Students will be presenting to the class car design ideas that show what they already know about making cars fast, economical, strong, and appealing to consumers. The purpose of this activity is to get the students prepared to generate thumbnail ideas with limitations, and allow them to modify their ideas later, rather than trying to come up with ideas after the limitations are set. (approx. time: 15 min)

**Lab Demonstration:** I will start by having the students identify parts of the sanding machines. I will be covering safety rules and proper handling methods related to belt sanders, disk sanders, drum sanders, spindle sanders, etc. The purpose of this demonstration is to familiarize students with the machines necessary to build CO2 cars. (approx. time: 15 min)

**Quiz:** The students will be taking a quiz on parts of sanding machines. They will get an extra  $\frac{1}{2}$  point if they bring in their notes. The quiz is broken into two parts, one is the identification of parts and the other is safety rules. (approx. time: 15 min)

### Materials:

Belt Sander  
Disk Sander  
Drum Sander  
Portable Belt Sander  
Spindle Sander  
Orbital Hand Sander  
Straight-line Sander

- A.8.1 Show that technology has allowed us to further the efforts of science and, in turn, science has enabled us to develop better technology
- A.8.2 Explain the need for and application of knowledge and skills from other disciplines when engaging in technological activities
- A.8.3 Identify and contrast the connections and differences between technology and other disciplines
- A.8.4 Determine that technological knowledge is valuable but not always available to everyone on an equal basis
- A.8.5 Analyze how cultures and groups value technology differently and how these values influence the development and acceptance of technology
- A.8.6 Analyze the distribution and access of various technologies and explain how inequities occur because of social and political systems
- A.8.7 Discover that human will or desire can lead to the design of new technology in order to seize an opportunity or solve a problem