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Clipper Creations

Download Full Lesson Plan

(Full teacher resource documents are included)



Lesson Focus
Develop a working model of a nail clipper. Note: This lesson plan is designed for classroom use only, with supervision by a teacher familiar with electrical and electronic concepts.

Lesson Synopsis
Students learn the basic principles of engineering design and model building.

Age Levels: 8-18

Objectives

- Explore the basic principles of engineering design.
- Learn how to build a model of a simple machine.
- Explore how a simple machine such as a nail clipper works.

Anticipated Learner Outcomes
As a result of this activity, students should develop an understanding of:

- Principles of engineering design
- Properties of objects and materials
- Model making
- Simple machines

Lesson Activities

Students design and build a working model of a nail clipper. Through the process, students explore simple machine construction and the process of model making, as well as learn about simple machines - a nail clipper is an example of a first class lever.

Resources/Materials

- Teacher Resource Sheets (attached)
- Student Activity Guide (attached)
- Materials Needed:
 - foam board
 - scotch tape
 - toothpicks

Alignment to Curriculum Frameworks

Curriculum alignment sheet is included in [PDF](#).

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