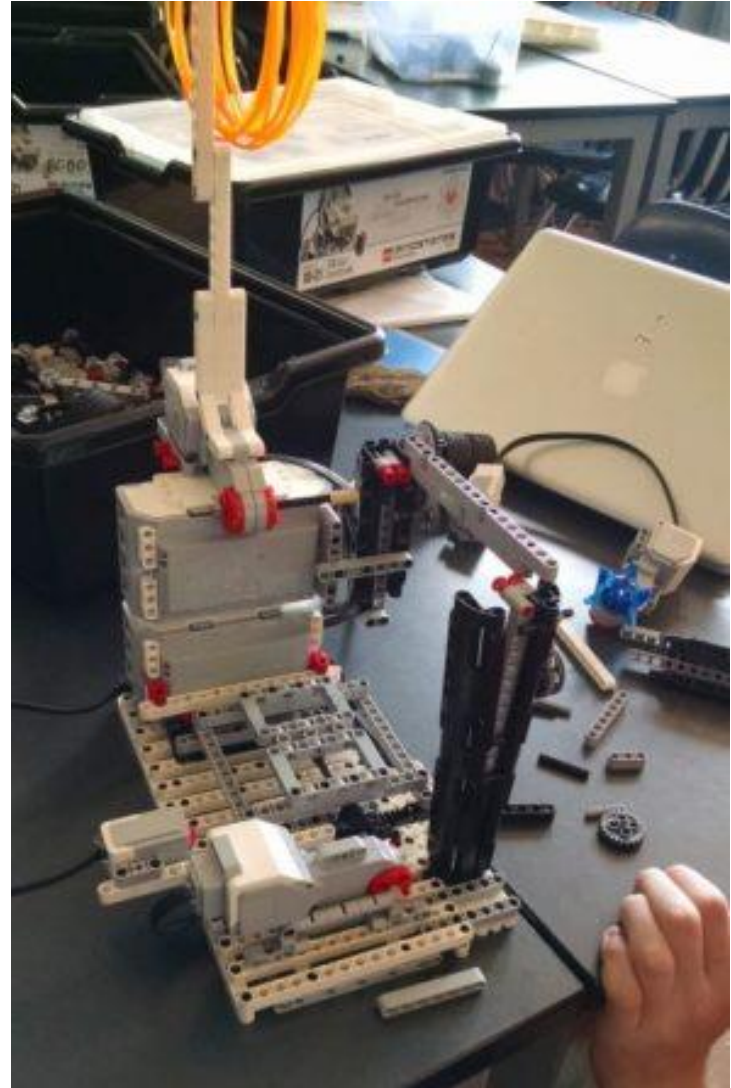


7th grade science for Tues., Nov. 21

- Start new unit:

Machines & Engineering!

- **Activity/homework: worksheet on work and machines**



NGSS standards for this unit

- (1) Define work in the scientific sense
- (2) Calculate the work done on objects; use the amount of work done to infer the amount of energy that exists in a system
- (3) Differentiate between work and power
- (4) Calculate the amount of power used by an object or in a system
- (5) Define what simple machines are; differentiate between simple and compound machines
- (6) Identify and describe types of simple machines; identify examples of simple machines in everyday life
- (7) Calculate mechanical advantage of simple machines
- (8) Calculate efficiency of simple machines
- (9) Design and carry out a scientific investigation to determine the mechanical advantage and efficiency of common simple machines
- (10) Design and construct a device that carries out a specific task using three or more different types of simple machines
- (11) Design and build a structure (or design a process) that conforms to specific design constraints (e.g., type and amount of materials)
- (12) Evaluate competing design solutions for a given problem or goal
- (13) Analyze data from tests to determine the best design for a given purpose