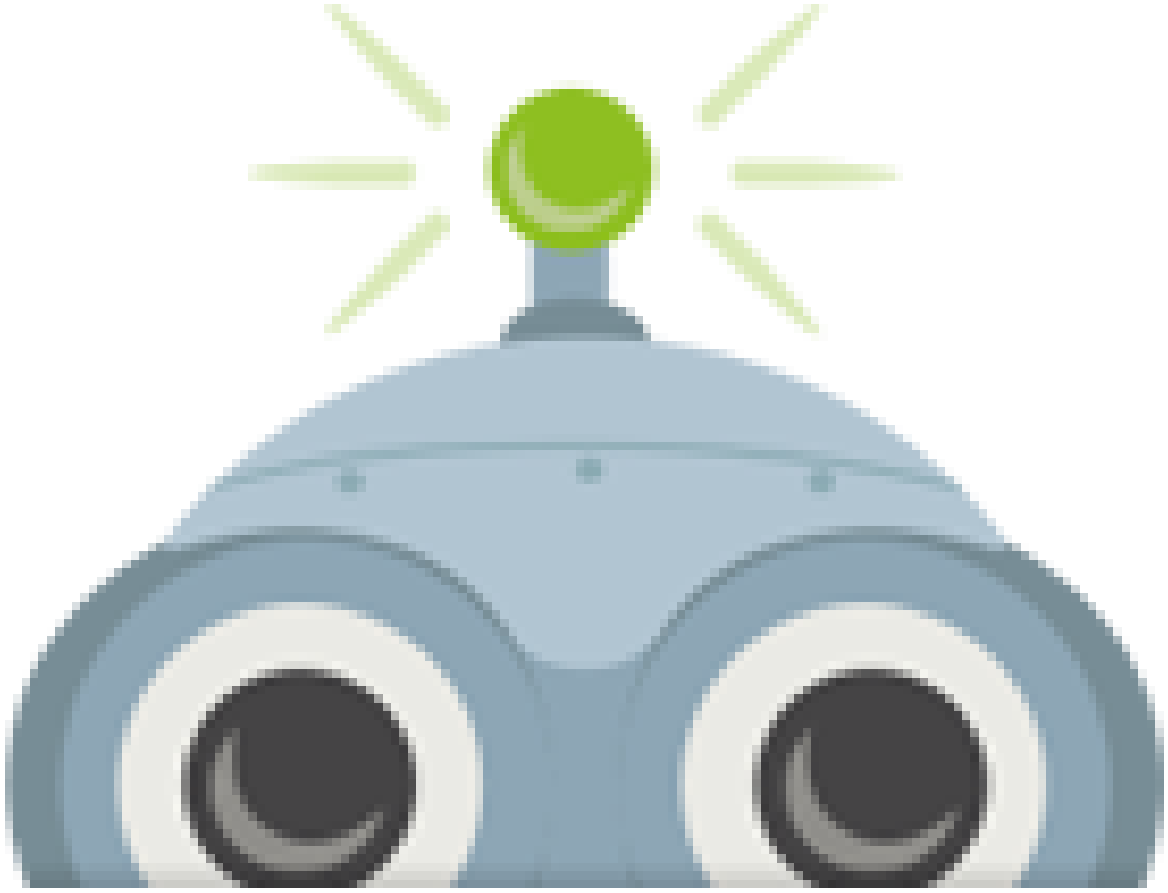
ROBOTS

Unit One

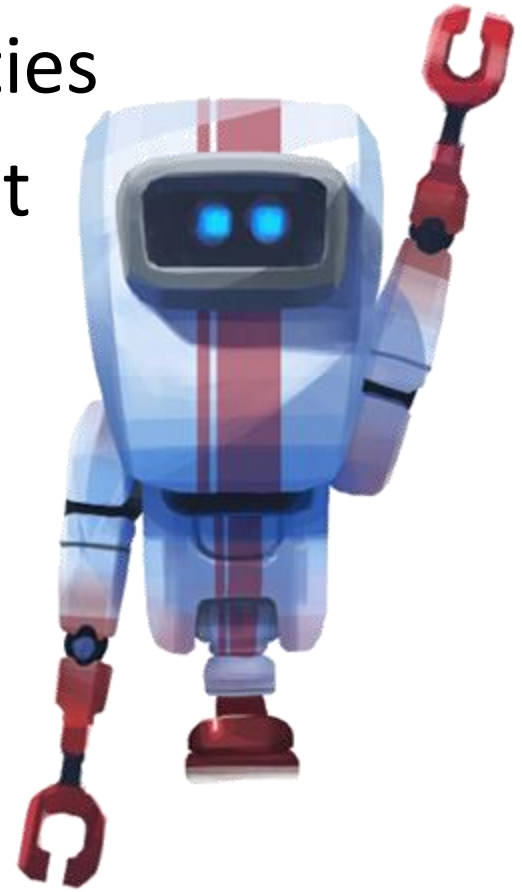
Day One



Introduction

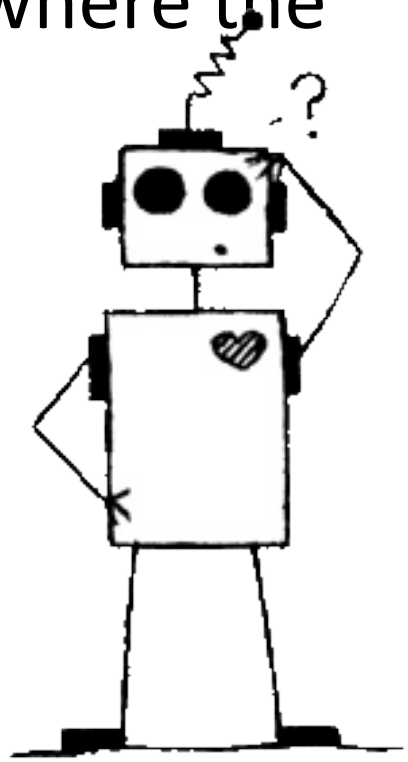
- Access prior knowledge with videos and books
- Discuss range of robot jobs & abilities
- Determine how students feel about

  Robots, ex. trust vs distrust



I, Robot

- Discuss robot and humans' ability (or lack of ability) to read each other
- Begin to explore history of robots & where the word itself began

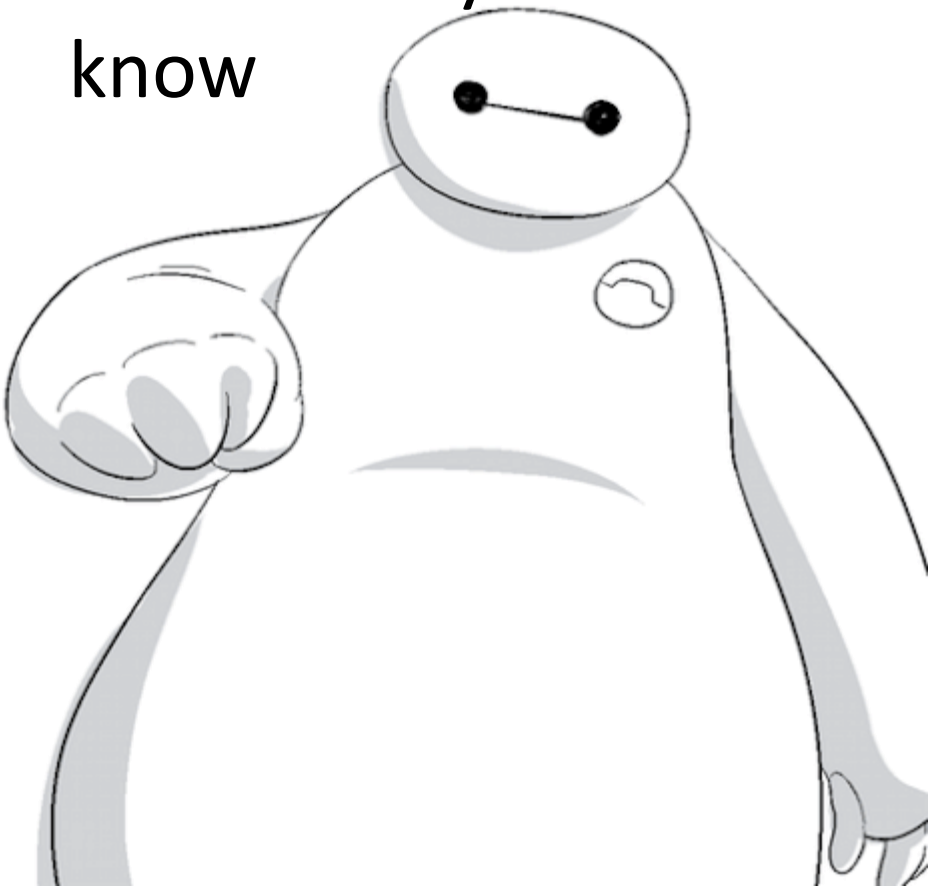


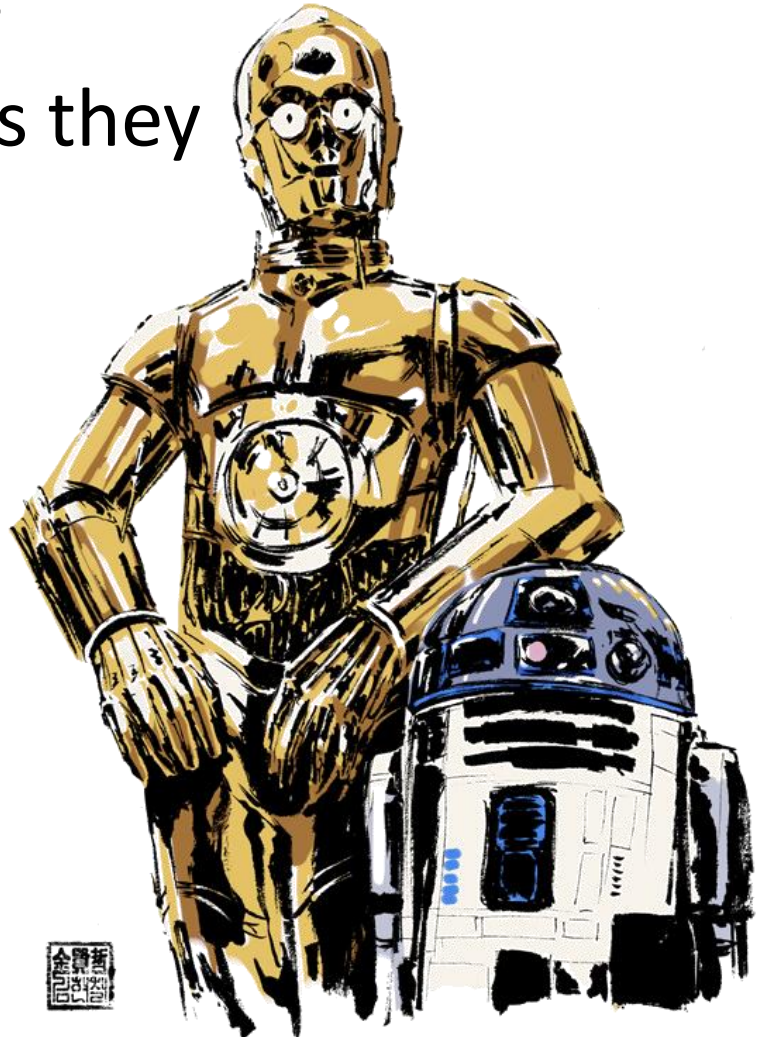
Where it all began

Discover Ancient Egyptian and Greek styles of 'robots'

Android Dreams

- Learn about fictional robots
- Students try to think of ones they know





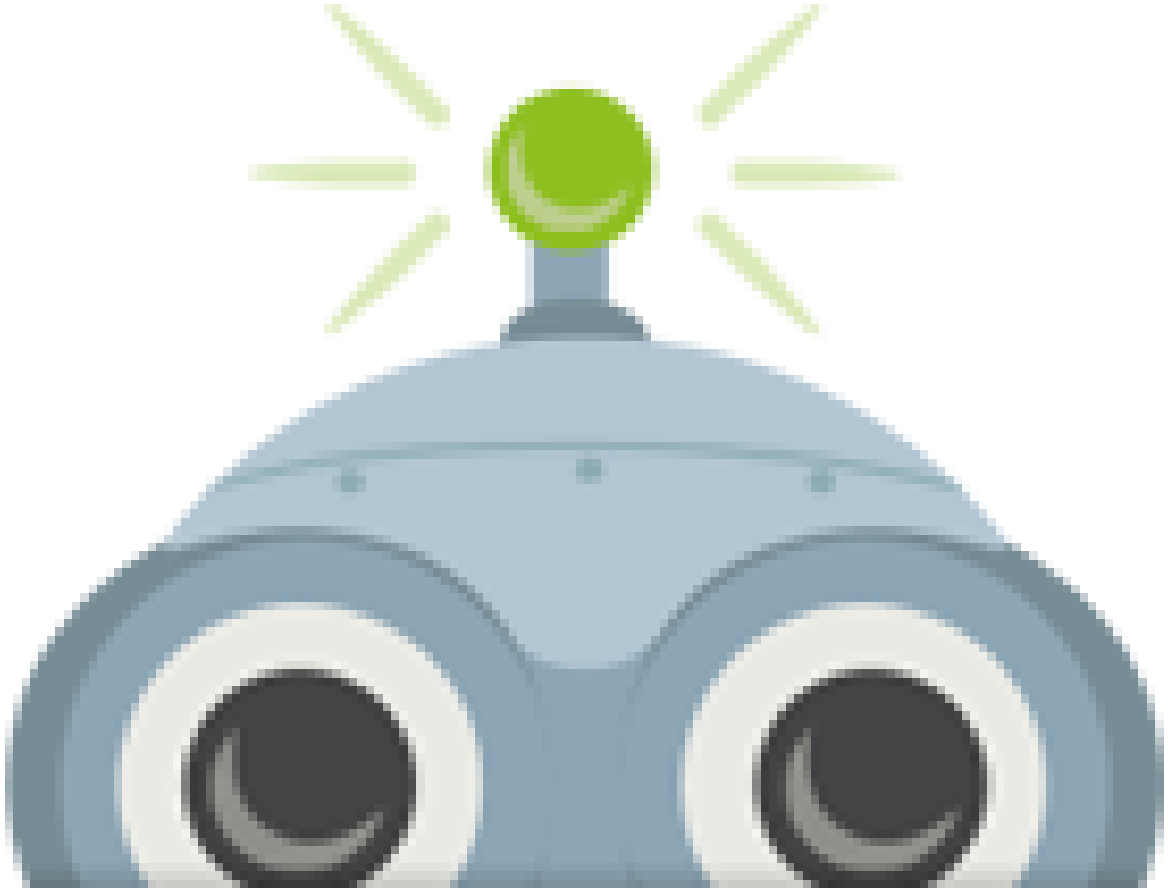
Talos

- Learn the myth of Talos, the first robot in history
- Students write & illustrate their own myths.

Talos' Island

Finish up with a fun game of Talos' tag to reinforce the concepts learned in the myth.

Day Two



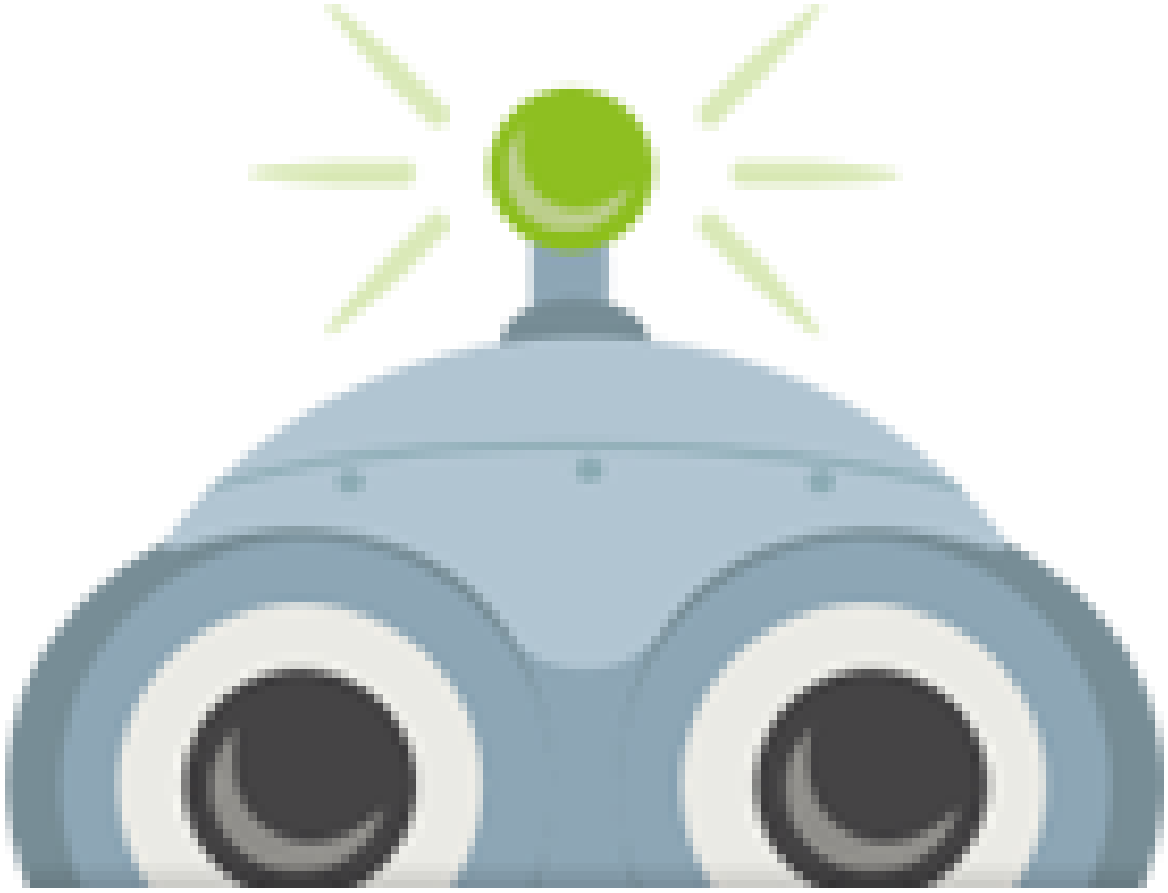
Whim-agination

Students are inspired to come up with a solution to a problem.

A robotic solution.

Then illustrate it through paint, name it, and explain how it solves the problem.

Day Three

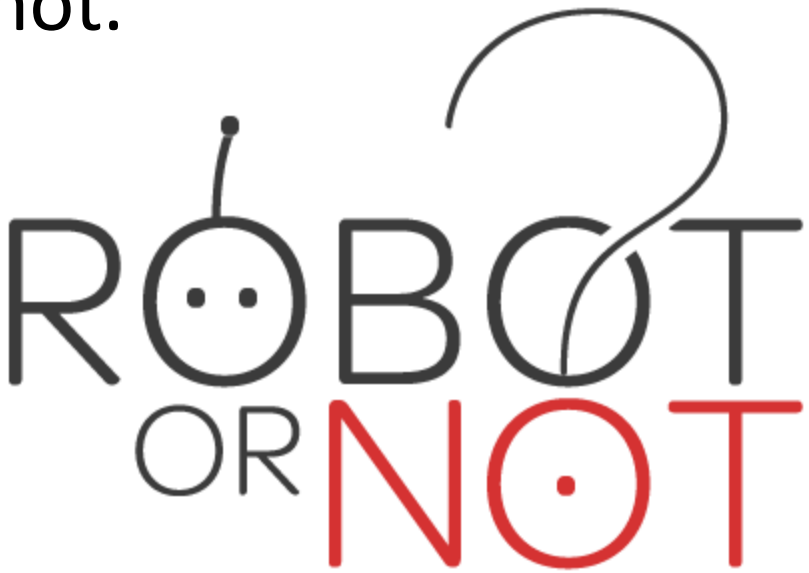


Mr. Robot? Oh!

- Explore just what makes a robot a robot.
- Determine how many robots students think they deal with daily
- Discuss whether they agree with the Sense, Think, Act theory

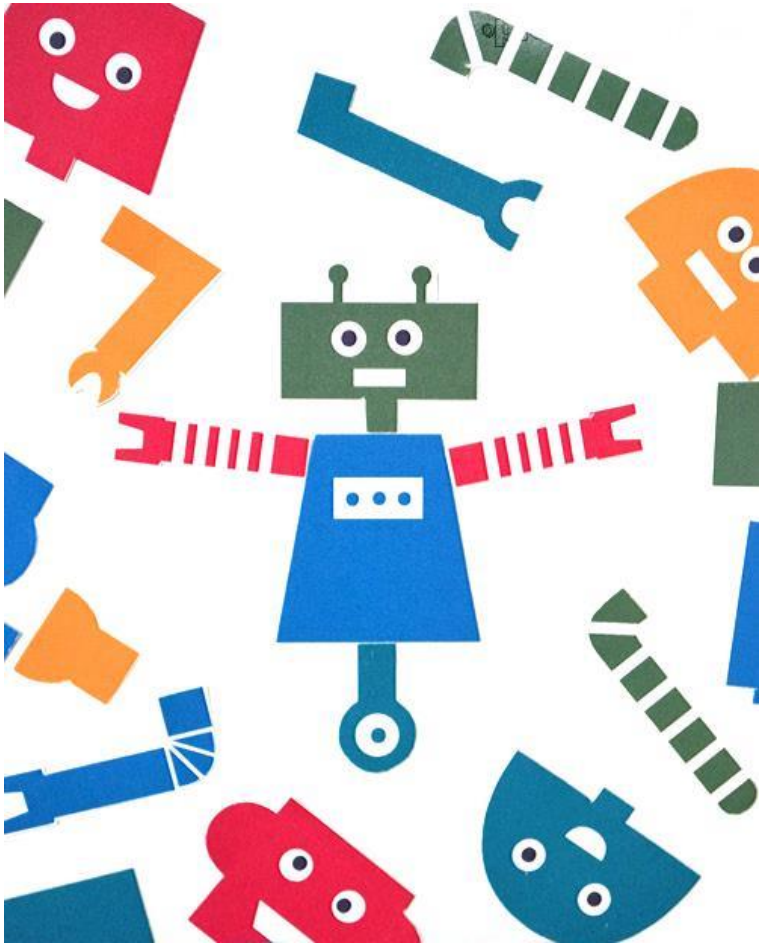
Robot, Or Not?

- Go on a fun scavenger hunt (and follow the flow-chart) to determine just how many robots are around!
- Track data and see if everyone agrees whether something is a robot…or not.

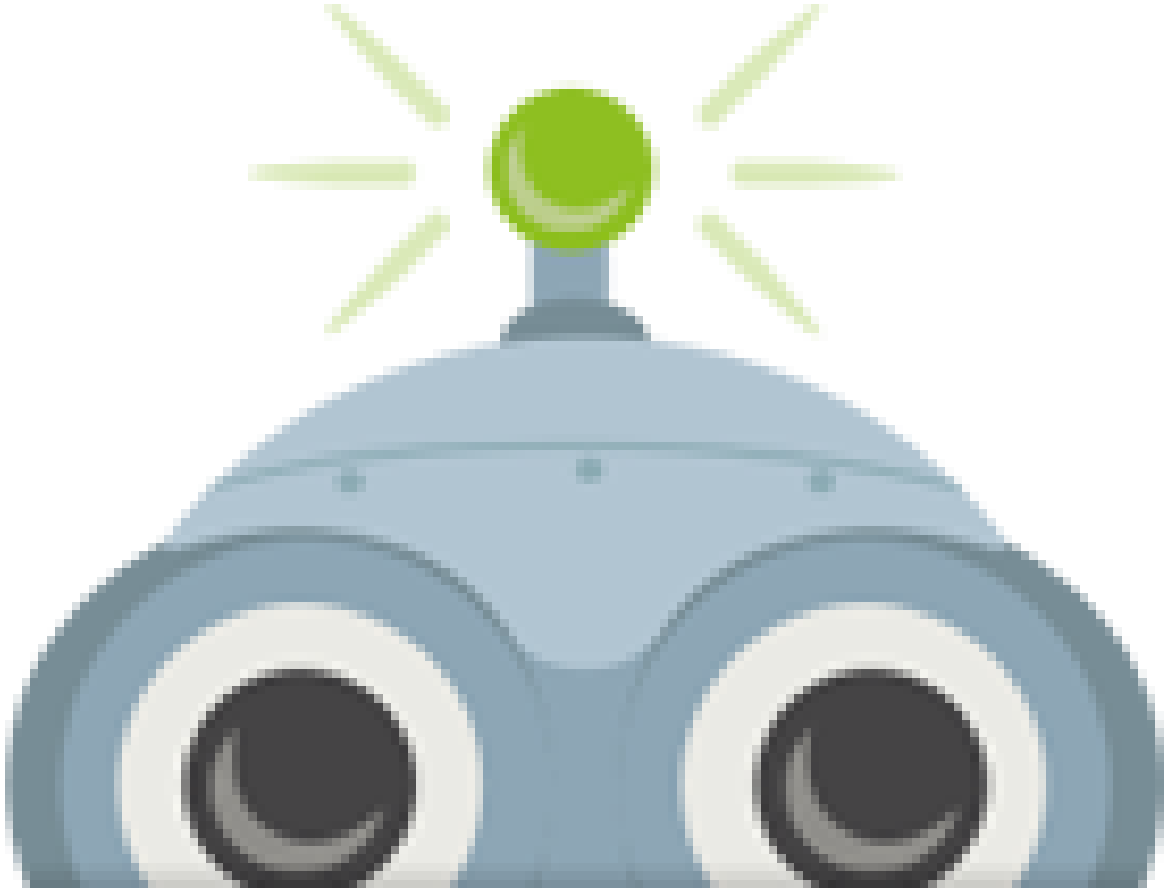


Assemble!: Robot Problem Solvers

Student teams race to create their own robots out of parts in this fun ‘hangman’ style math skills practice game.



Days Four Through Eight



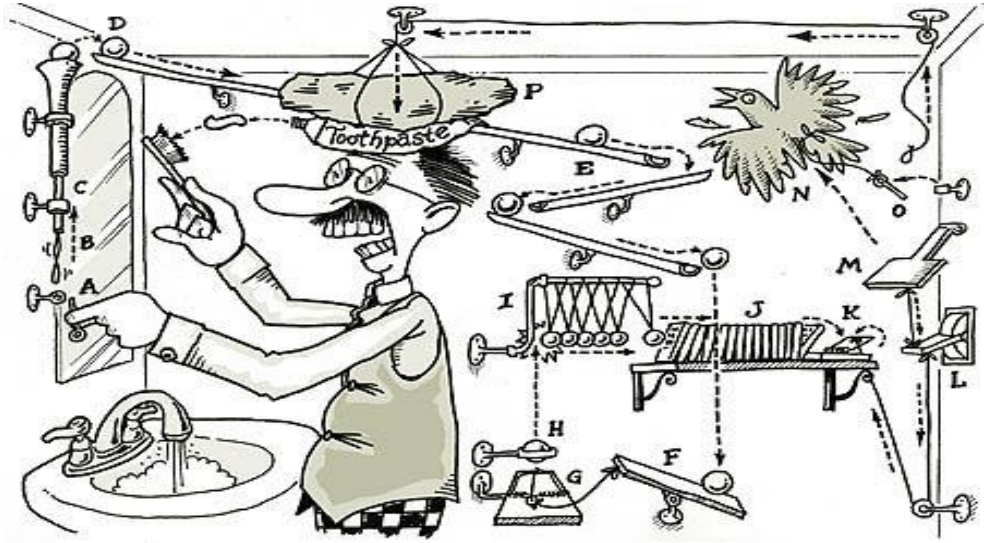
Between the Greeks and the Geeks: Automatons

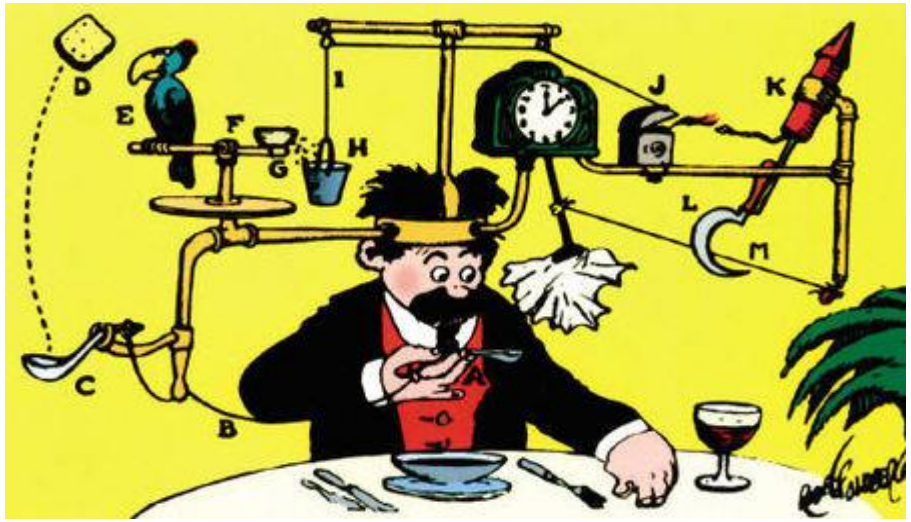
- Explore the evolution of robots from ancient Greek inventions to automatons in the Middle Ages.

Watch Pipe Dreams: a modern form of 'automaton.' [*Voted one of the 50 best 3D animation projects ever. Most of the other winners were big-budget movies (The Matrix, Toy Story, Star Wars) and a few video/computer games (Doom, Tomb Raider, Myst).]*
And see how it was made into a real world version by intel.

Chain Reaction: Rube Goldberg Project—Creativity in Motion

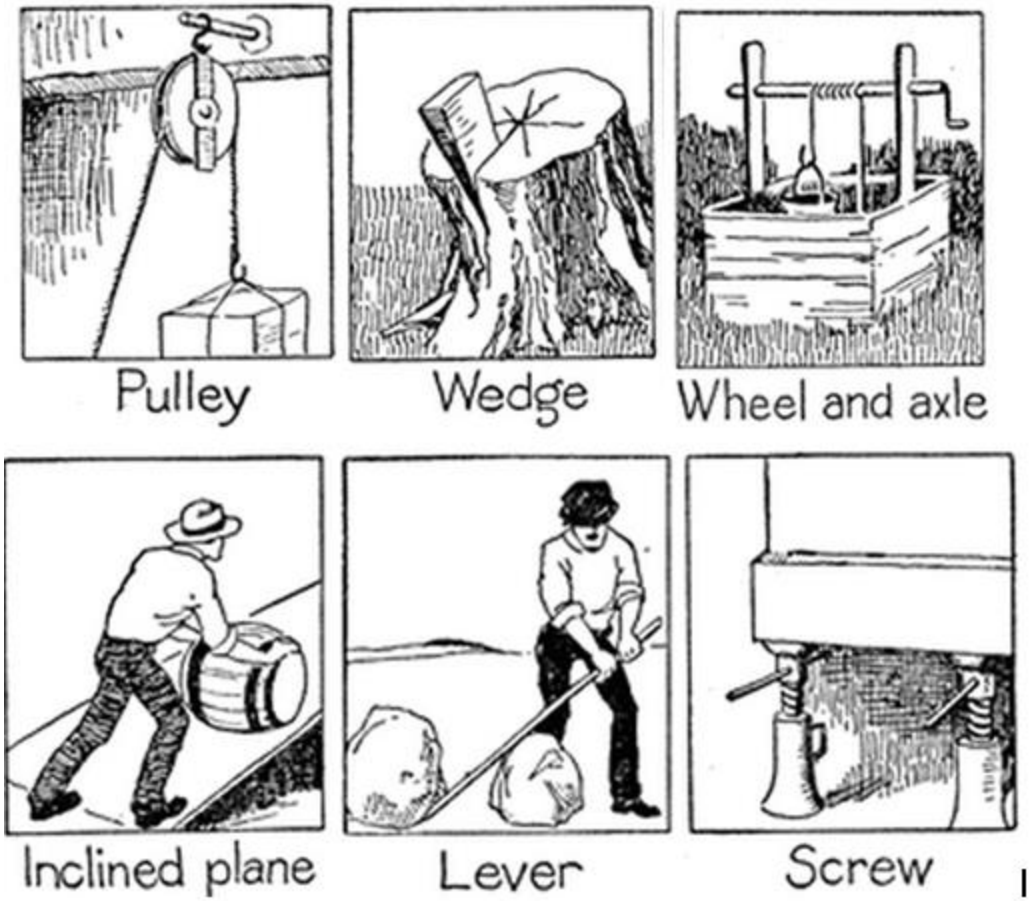
- Learn about who Rube Goldberg was
- Explore his cartoons and ideas





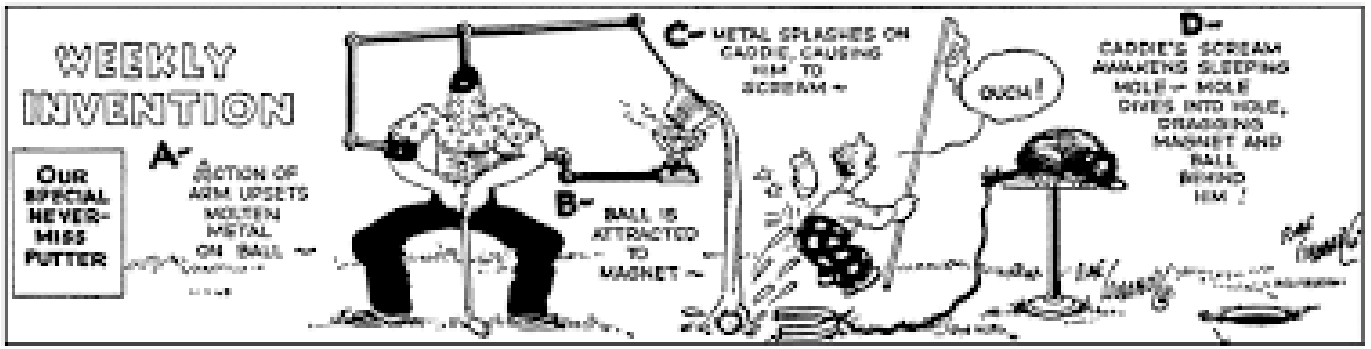
Six Machines to Do It All, Six Machines to Bind Them

Explore the six simple machines, how they work, and make sample models of them.



That's So Rube of You!

- Now that we know about simple machines, let's combine a few into something new, a complex machine (several simple machines working together)!
- Get inspiration from videos and Rube Goldberg's illustrations



That's So Rube of You!

And then students work (individually or in teams) to follow the engineering design process create their own Rube Goldberg style machine to solve a specified problem.