

Machines to the Rescue!

Inspired by *Mazie's Amazing Machines* by Sheryl Haft Miller

Goal: Invent a machine to solve a problem

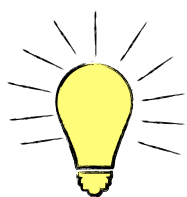
You might use: Recycled materials, cardboard boxes, glue, tape, scissors,

Different approaches:

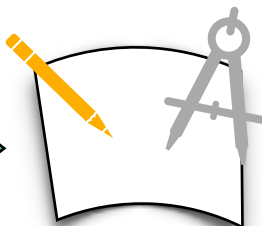
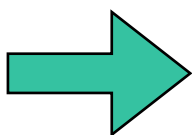
- Think of a problem you want to solve that could be helped by a machine.
- **Think** about how will you solve the problem. **Draw** a picture of your solution.
- **Build** your machine. Test your machine. Does it solve the problem? If yes, celebrate! How could you make it even better? If no, it does not solve the problem, revise by following the previous steps again, think, draw, build. Test and revise until it works!

To think about:

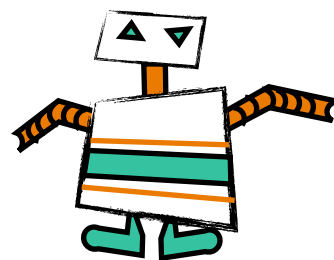
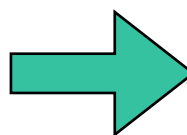
- We all encounter problems that need to be solved. Use your imagination when thinking of a solution.
- We all also make mistakes! This is the way we learn. Don't get discouraged if your machine doesn't work the first time you try it. They rarely do! The way to success is persistence. Persistence means not giving up when things don't work out. It means we keep trying to succeed. We might need to think about the problem and solution in a different way.
- Try breaking the process into smaller steps or working backward. Smaller steps are more doable and more easily achieved. Working backward means starting at the end of the task and working backward toward the beginning of the task.



Think



Draw



Build