



# Think Like a Computer

Computers do not have a brain like we do. Instead, computers rely on written sets of instructions called algorithms to “think,” solve problems, and complete specific tasks.

Because of this, computers are only as good as the instructions they receive from people. Human computer programmers must translate human goals into code that a machine can recognize, understand, and execute.

As this activity demonstrates, computer algorithms must be extremely specific and precise in order for computers to be successful. Computers cannot think about whether or not the instructions they receive are right or wrong. They will always do exactly as they are told—even if the person made a mistake in their code!

## Materials needed:

- Paper
- Pencil
- An activity partner

## Step-by-step instructions:

1. Choose a simple task you do every day (like brushing your teeth, tying your shoes, or riding a bike).
2. Write down step-by-step instructions for completing that task from start to finish.
3. Without telling your partner what the task is, hand them your instructions.
4. Tell your partner that they must follow the directions exactly as they are written, without making any assumptions!
5. Did your partner successfully complete the task? Rewrite any instructions that were confusing or misunderstood.

## Discussion questions:

- Was it easy or hard to write extremely clear instructions?
- When someone tried following your instructions, how did they react? Did they complete the task successfully?
- Do you think computers are smart? Why or why not?

