

Maze Building Challenge

- Computer coding is essentially a language that a computer uses. A computer can only do what the code instructs it to do. So, we have to break down every action involved with a task into small, doable steps. (This is called decomposing.) For instance, we can't just say we want the mouse to go through the maze, we have to tell it every step to take. Think about telling someone who has never seen a toothbrush how to brush their teeth. What do you tell them?

Pick up toothbrush, put hand on faucet handle, turn handle toward you, put brush side of toothbrush under water, turn handle away from you, pick up toothpaste, unscrew the lid, squeeze tube until toothpaste comes out, stop when toothpaste covers the top of the brush, put lid back on toothpaste, put brush side of toothbrush on front teeth, move brush from side to side, repeat on all teeth, spit out toothpaste foam from mouth, pick up a cup, put hand on faucet handle, turn handle toward you, put cup under water until it is full, turn handle away from you, put cup up to lips, sip small amount of water, swish water in mouth, spit water out

That's 24 steps and we are not even done!

- Now let's do a human obstacle. Who would like to volunteer to have their eyes blindfolded and follow instructions from the group to get from one side of the room to the other?
- Now let's do that with the mouse maze! Do you want to create your own with tape or use the kit?