

Sandwich 'Bot Directions

The following are some hints to help you carry out your role as a “multi-purpose” robot today.

What:

The learners will be writing down instructions for a "multi-purpose" robot to make frosting and graham cracker snacks. [You are the "multi-purpose" robot!]

Purpose:

Demonstrate that a computer program

1. is a set of instructions.
2. must be exact to avoid problems
3. is not always fool-proof

Task:

You **MUST** follow the directions literally! For instance, if the direction is to "Take the frosting out" you could get up and walk out (side) and continue down the sidewalk. The programmers will have to run up with a "stop and return" command written on a paper to get you to come back. Or perhaps if the direction is to "Take the frosting out and put on the cracker" then you should take the frosting package and place it on the cracker package or place it on a cracker and smash it. Anything can cause a robotic meltdown or unexpected robotic behavior; however, the following are some ideas to help you get in a literal mindset.

- They must specify which frosting to use if they have a choice.
- They must specify a utensil to use. (You can use the wrong end of the knife if you are being mischievous.) If no utensil is specified you could use your fingers.
- They must be specific in opening and closing packages. If a package is closed and you have no directions to open it you might spread frosting on the package. If a package is open and you have directions to open it you might have a robotic meltdown.
- They must be specific in locating objects. If they do not specify the location your default is to look on the table right in front of you. If you do not find the object you can have a robotic meltdown.
- They should specify what is to be done with the snack (hopefully "feed to a human"). A mischievous robot might eat the snack and then have a robotic meltdown. If nothing is specified a robot may walk over to the trash and throw a frosting sandwich away or just lick the sandwich.
- If you are having trouble reading the directions you can ask one of the learners to read what they have written. I don't want to worry too much about neatness.
- Do not respond to verbal queries from the learners. However, it is helpful if you read aloud the step that you are performing.

Try to think of any way to follow the letter but not the intent of the program. Obviously, if the frustration index gets too high you can choose to be a tad less picky. Overall have fun!

Robotic Meltdown

A robot that is having a meltdown may make weird sounds, zaps or make weird twitching motions. After the meltdown the robot cannot move (at least not much) until it is restarted and given new instructions.