

# How to make a peanut butter and jelly sandwich

**Purpose:** Not only does this activity help with practicing clear communication skills, it can show the difference between how humans and computers interpret instructions.

**Supplies:** Paper and writing utensils, peanut butter, Jelly, bread, plastic knife, paper towels, and a plate.

**Note:** Due to concerns about allergies, this activity can be completed with any task! It could even be opening a bag and getting out a notebook and pen to write down a message! Get creative!

**Set up:**

Split the class into several groups of around 3-6 students.

Tell the class that you are going to try to make a peanut butter and jelly sandwich, but that they are going to have to write the instructions. Have each group take 5-10 minutes to write out instructions step by step. Let the students know that you will be acting as a computer that only knows how to do what it is told. Students should be encouraged to be specific, but do not tell them how specific.

Once all groups are done, choose one group to give their instructions first. As the students read their instructions, act it out, and follow them as literal as possible. Example: If the instruction was “Grab a piece of bread” you should grab the bread, but from the outside of the bag, since the instructions did not say to open the bag and to reach into it to get to the piece of bread. Or if the instructions were “Scoop the peanut butter onto the knife”, you could try to put the knife into the jar, but end up hitting the lid. “Spread the peanut butter onto the bread” could be done as spreading it on a piece of bread that is still in the bag.

After all the groups have tried their instructions, or at least as many as time will allow, explain to the group that you were demonstrating how computers need very specific instructions and only know what they are told, unlike humans who are able to interpret instructions even if steps are missing.