**Waits, Loops and Switches Worksheet**

1. **Program the robot to perform the following (first, attach to your robot 2 touch sensors, name them A and B, and a sound sensor):**

* **Stay at rest and display “Ready” on the screen until detecting a loud noise. Once a loud noise is detected:**
* **Move left and display “Left” whenever touch sensor A is pressed.**
* **Move right and display “Right” whenever touch sensor B is pressed.**
* **Move forward and display “Forward” whenever both touch sensors A and B are pressed.**
* **Stay at rest and display “Stop” when no buttons are pressed.**

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**🡺 Hint: Click on the icon, drag the block into the program, and select “Text” from the drop-down menu to display text on screen.**

1. **Brainstorm about possible programming solutions and write below the one that your group thinks is the best one. Write in English the various steps that are necessary.**
2. **Draw the various NXT blocks that will be needed in the program.**

**🡺 Then use the LEGO software to create your program, download and test it with the robot and sensors, revise and retest as necessary until it works as a successful solution.**

1. **Did you have to “iterate” (make changes to the program, etc.) to make it work?   
   How many iterations did you have to perform? Explain.**