Name	Name	Set #

Today we're going to build an electronic safe deposit box to keep your valuables secure. This is a lengthy build so you'll need to work closely with your partner to get it finished in time.

The Build

- 1. Go to https://spike.legoeducation.com
- 2. Click on this button:

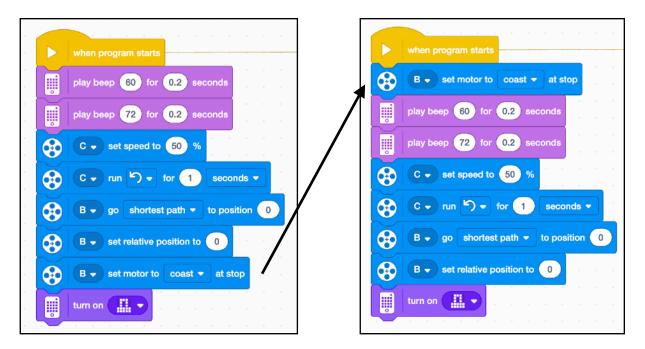


- 3. Click on **Unit Plans** => **Kickstart a Business** => **Keep It Safe**, then click on the **START** button
- 4. Follow the instructions, make sure to click on the **BUILD** button when it appears
- 5. You'll notice that there are two sets of instructions, one for the **Safe-Deposit Box** and one for the **Safe-Deposit Door**. In order to finish the build in time, you and your partner will need to *build both at the same time*.
- 6. You and your partner will combine your parts together in step 32 of the **Safe- Deposit Door** instructions.
- 7. Once you're done with the build, turn this page over and read the back side.

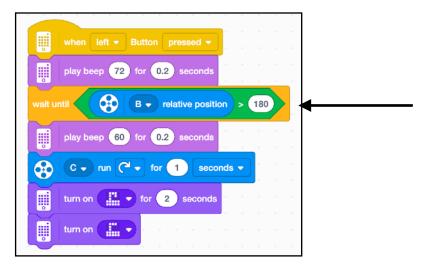
TURN OVER, THERE'S MORE >

The Program

 There is a bug (a problem or mistake) in the program provided by LEGO. The "set motor to coast at stop" instruction is in the wrong place. You'll need to move it to the top of the program as shown below. Your dial won't turn unless you make this fix:



2. When it comes time to add a condition to your program, add it after the first "play beep" command like this:



- 3. Next, modify your program so that it works like a dial on a safe. You should need a few clockwise and counterclockwise turns to make the safe unlock.
- 4. Don't forget to clean up and have an adult check your box before putting it away