




| <b>Unit 4 Remix Log</b>  | Name: _____   |  |                      |                           |  |  |  |  |  |  |  |  |
|--|---|--|----------------------|---------------------------|--|--|--|--|--|--|--|--|
| <b>Remix Step 1: Review your code from Mission 8 and 9</b>   |   |  |                      |                           |  |  |  |  |  |  |  |  |
| Mission 8: Navigation<br>What does this program do?  |   |  |                      |                           |  |  |  |  |  |  |  |  |
| Mission 9: All Systems Go!<br>What does this program do?   |   |  |                      |                           |  |  |  |  |  |  |  |  |
| What programming concepts did you learn and use in each mission?   |   |  |                      |                           |  |  |  |  |  |  |  |  |
| <b>Remix Step 2: Remix Project Concept</b>   |   |  |                      |                           |  |  |  |  |  |  |  |  |
| Look over the remix suggestions. Discuss with a partner. Then decide what you want to do for your remix project. Describe what your remix project will do: |   |  |                      |                           |  |  |  |  |  |  |  |  |
| <b>Remix Step 3: Plan your code. What variables will you use in the project?</b>   |   |  |                      |                           |  |  |  |  |  |  |  |  |
| Fill out the charts below. Use another piece of paper to design your program with a flowchart or pseudocode.   |   |  |                      |                           |  |  |  |  |  |  |  |  |
| What variables and lists will you use in the project? Fill in the chart. You do not need to fill in every line, or you can add more.                       | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Variable / List Name</th> <th style="width: 50%;">What it will be used for:</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table> |  | Variable / List Name | What it will be used for: |  |  |  |  |  |  |  |  |
| Variable / List Name   | What it will be used for:   |  |                      |                           |  |  |  |  |  |  |  |  |
|  |   |  |                      |                           |  |  |  |  |  |  |  |  |
|  |   |  |                      |                           |  |  |  |  |  |  |  |  |
|  |   |  |                      |                           |  |  |  |  |  |  |  |  |
|  |   |  |                      |                           |  |  |  |  |  |  |  |  |
| What functions will you write? Describe each one.  | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Function name</th> <th style="width: 50%;">What it will do</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>  |  | Function name        | What it will do           |  |  |  |  |  |  |  |  |
| Function name  | What it will do   |  |                      |                           |  |  |  |  |  |  |  |  |
|  |   |  |                      |                           |  |  |  |  |  |  |  |  |
|  |   |  |                      |                           |  |  |  |  |  |  |  |  |
|  |   |  |                      |                           |  |  |  |  |  |  |  |  |



|   |        |                   |
|---|--------|-------------------|
| What buttons will you use, and what will happen when pressed? |        |                   |
|   | Button | What will happen: |
|   |        |                   |
|   |        |                   |

**Remix Step 4: Write your code**

Use the sandbox  when you write the code. Write just a few lines at a time and test often.

**Remix Step 5: Commenting and feedback**

|               |   |
|---------------|---|
| Documentation | <ul style="list-style-type: none"> <li>• Make sure your code is readable by adding blank lines</li> <li>• Add comments to explain sections of code</li> </ul> |
|---------------|---|

**Peer feedback:** Get feedback from two (or more) people. You can be one of the peer reviewers.

Peer Review #1 Name:

Go through the checklist. Are all requirements met? If not, list any missing criteria.

What do you like about the program – be specific!

Give at least one suggestion. Begin with “what if” or “maybe you could”

Peer Review #2 Name:

Go through the checklist. Are all requirements met? If not, list any missing criteria

What do you like about the program – be specific!

Give at least one suggestion. Begin with “what if” or “maybe you could”

Review the comments. Then take time to improve or add to your project.



## Post-Mission Reflection

What did you change in your project after reading the feedback?

What are some reasons you would give your friend for learning to program?

### Unit 4 Remix Rubric Checklist:

- Uses one or more variables, each with a descriptive name
- Reads one or more sensors: encoders, battery power, temperature, or accelerometer
- Uses the data from the sensor reading to control the CodeBot
- Controls one or more peripherals: LEDs, sound, motors
- Uses one or two buttons as input
- Defines and uses at least one function
- Defines and uses at least one list
- Includes something extra (sound, more than one sensor, more than one function, etc.)
- Code follows programming conventions of comments, readability, indenting, and capitalization
- Code runs with no errors