**MHS Coding Enrichment – April 18, 2019 -Begin Here**

Instructions:

You must work your way through the coding continuum below.

Depending on your coding experience, some of these challenges will be very easy and will only take minutes to complete, for others it may take a long time. **You will have options, but you MUST progress through the continuum below; you can’t “skip” any steps.**

In each case as soon as you’ve finished an activity you must show a teacher your finished product and **wait for a teacher to initial the chart before you may continue to the next step**. You will need to work your way UP the continuum:

**Coding Continuum Card**

|  |  |  |  |
| --- | --- | --- | --- |
|  | 10 | M-Bot/Sphero – Experimenting |  |
| 9 | Microbit 2/2 |  |
| 8 | Microbit 1/2 |  |
| 7 | Microbit Required (“A or B”) |  |
| 6 | Makey-Makey Project |  |
| 5 | Scratch 2/2  (sprite moves with arrow keys) |  |
| 4 | Scratch 1/2 – (your choice) |  |
| 3 | Scratch (required) |  |
| 2 | Code.Org Lesson 2 (# 2-10) |  |
| 1 | Unplugged Activity  (paper-based) |  |
| **START HERE** | | **Activity** | **Initials** |
| **Your name:** | | | |

***Reminder: You must get your Contiuum Card initialed by a teacher before going to next level!***

**MHS Coding Enrichment Summary:  
(Back of Coding Contiuum Sheet)**

At every step of the way you MUST get your Contiuum Card initialed by a teacher!

**1) Unplugged Activity** is just the paper-based activity.

**2) Code.Org:** Visit https://code.org/join and enter BNQKNY

Sign in using username and password.  
Do **Lesson 2**: Introduction to Online Puzzles **#2-10**

**3,4,5) SCRATCH:** Go to <https://scratch.mit.edu/> and sign in with username and password.

**REQUIRED**: Do the super-simple quick Getting Started video/lesson  
**REQUIRED**: Do **2 more projects** of your choosing, the second one must include a project where the arrows are used to move a Sprite around. Be sure to share these 2 projects in the MHS Studios.

6) **Makey-Makey**- Plug in a Makey-Makey and prove it’s interacting with your Scratch project.

7,8,9) **Microbit** –   
  
**REQUIRED**: Write the “AorB” code   
**REQUIRED**: Do any 2 programs of your choosing.

10) Experiment with a **SPHERO** or **MBOT** or a **LBR** (Little Robot Friend)

***Reminder: You must get your Contiuum Card initialed by a teacher before going to next level!***