## Things to consider:

I. Yes! It is possible to get the second hand to line up perfectly as each minute and hour passes. It is a challenge that can be accomplished if you unplug the power adapter from the wall (or push the reset button) when the second hand is perfectly in the middle of the 12 position marker. Next, set the hands 3 minutes ahead of the desired start time. (For example, if it is @ 9:34 AM when the power is removed, set the time to 9:38 so that when power is restored at 9:35 the time will start being shown at the start of 9:30.)

Lastly plug the power adapter back into the outlet approximately 4 seconds before the next minute is set to begin.

Good Luck! Those that succeed will be considered a...

## Master Sub-Genius of the ABC Time Machine UNIVERSE!

- II. There is a coin sized (CR2032) battery located on the RTC (Real Time Clock) module. This battery will last 5-10 years as long as power is normally applied to the clock. The purpose of the battery is to maintain the current time for the CST (Central Standard Time) zone. If power is lost, the time and hourly chimes will continue, however the analog hands will need to be set to the current time again.
- III. If the clock is going to be used in another time zone of the world, the local time will need to be reset in order for the hourly chimes to occur correctly during normal daylight hours. (See Below)
- IV. In-depth explanations as well as guides to test, reset and reconfigure the ABC Time Machine will be located at the address link below.

https://github.com/BMETsAreAwesome/JHS-2018-ABC-Time-Machine

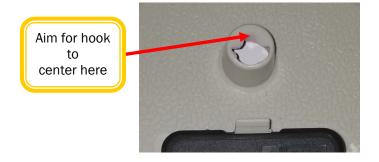
I encourage you to explore the Computer Coding world. The Coding World is not only for the computer genius types of the world. The coding world is there so that everyone's dreams of the world may be turned in to reality!



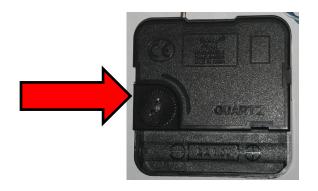
## Android Based Clock (ABC) Time Machine Quick Reference Guide

## Installation and Setup:

1. Locate a safe and secure place to hang your ABC time machine. It can be hung on a wall using a long pushpin, a removable adhesive hook or an angled nail.



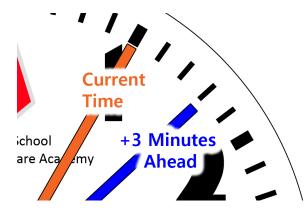
2. Set the analog clock mechanism to the <u>CURRENT time</u> using the adjustment wheel located on the back of the main clock body.



3. Connect the mini-USB connector cord to the matching connector located on the Arduino Controller.



- 4. Connect the ABC USB power cord into the AC power adapter.
- 5. <u>After verifying</u> that the power cord and power adapter with can be connected safely to a wall outlet, set the analog ABC hands to <u>3 minutes ahead of the current time</u>.
- 6. Lastly, plug the ABC power cord into the 5V USB adapter.



- \*\*\* <u>Please note:</u> The adapter should not be used for charging or powering any other device than the ABC clock. Damage or other could occur to the power supply.
- 7. If the setup procedures were successful, the second hand should start ticking approximately 3 minutes from when power was applied.