## **Unit 2 - Intro to Coding (How to Speak to a Computer)**

Date	Due	In Class
Wed, 9/3	ID a computing innovation that mattered to you AND the input, process, output, and storage that it uses	2.1 Your Flowchart - Building Blocks of Algorithms What is sequence, selection, and iteration?
Thu, 9/4	ID your own examples of sequence, selection, and iteration	Intro Blown to Bits  2.1 Your Flowchart  • How to take screen shots • Intro Flowchart-related HW (We will do the first one together.)
Fri, 9/5	Finish Flowchart	2.1 Your Flowchart  Peer Review Intro Flowchart-related HW (We will do the first one together.)
Mon, 9/8	Flowchart-related HW	Intro Vocab Slide Deck, Runestone Login 2.2 I Have a Dream, parts 1 and 2  Get App Inventor set up on phone Our first app in App Inventor! Featuring buttons, labels, and audio Vocab: Boolean Expression, logic error
Tue, 9/9		Finish I Have a Dream, parts 1 and 2
Wed, 9/10	Finish programming part for I Have a Dream part 2	Wrap up I Have a Dream, part 2 Intro to Self Check & Reflection Questions  • Sentence starters
Thu, 9/11	Complete 2.2 Self Check & Reflection Questions  You read pages 1-7 in Blown to Bits Ch 1 and answered related questions	<ul> <li>2.3 Seeing Algorithmic Building Blocks in Code</li> <li>Sequence, Selection, Iteration</li> <li>Code to show examples of each</li> </ul>
Fri, 9/12	You read pages 8-17 in <u>Blown to Bits</u> Ch 1 and answered related questions	2.4a Boolean Expressions Joining DeltaMath
Mon, 9/15	Blown to Bits, Chapter 1 Questions	Go over solutions to Blown to Bits 2.4b Boolean Expressions, continued Double checking with Friday Begin Boolean Expressions on Delta Math
Tue, 9/16	Boolean Expressions on Delta Math	<ul> <li>2.4b Boolean Expressions in Applnventor</li> <li>Begin 2.4c QC</li> <li>2.5 Connections <ul> <li>What is an Abstraction?</li> <li>Abstraction in I Have a Dream</li> </ul> </li> </ul>
Wed 9/17	2.4c Boolean Expressions QC 2.5 Abstractions HW	2.6a Conversions (Decimal/Binary)  • What is a decimal number?

		<ul><li>What is a binary number?</li><li>Counting forward in binary</li><li>Converting decimal to binary</li></ul>
Thu 9/18	2.6a homework on paper	<ul> <li>2.6b Conversions (Decimal/Binary, continued)</li> <li>Q&amp;A on HW</li> <li>Converting binary to decimal</li> <li>Some binary-related questions</li> <li>How many numbers can be stored given a certain number of bits?</li> <li>What is the largest number that can be stored given a certain number of bits?</li> <li>Time to start HW</li> </ul>
Fri, 9/19	2.6b homework in Google Classroom	2.6c Conversions (Decimal/Binary/Hexadecimal)  Q&A on HW  Practice
Mon 9/22	Conversions Practice:  Worksheet (printed)  DeltaMath	Go over DeltaMath 2.6 Binary QC - one attempt Complete AP Classroom Questions Friendly Binary Competition
Tue 9/23	No School - Rosh Hashanah	
Wed 9/24		Delta Math - conditionals and variables, tracing
Thu 9/25		2.7 Rock, Paper Scissors Lab
Fri 9/26	Vocabulary Slides	2.7 Rock Paper Scissors Lab (should be able to complete HW in class)
Mon 9/29	2.7 RPS HW	Go over 2.7 RPS HW Unit 2 Test Review
Tue 9/30*	Study	Unit 2 Test

## Sites that will help us:

- AP Classroom (<u>myap.collegeboard.org/login</u>) this site is created by The College Board to provide practice problems for you.
- App Inventor (<u>ai2.appinventor.mit.edu/</u>) this is our development environment, or where we will go to create code.
- Blown to Bits (<u>bitsbook.com</u>) our textbook for this course. Most of the time, you will be given links to the section of this book that is related to the unit we are learning.
- CSP Curriculum (<u>runestone.academy/runestone/books/published/mobilecsp/index.html</u>) We will use this site for resources about how to code.
- Google Classroom (<u>classroom.google.com</u>) We will use Google Classroom to manage class surveys, hand in work that does not require anything "fancy" to run like an image, document, or spreadsheet.