## Essential Question(s):

- How do we program a computer?
- How do we design a game?
- What's something important going on in our community? How can we publicize it?

## Content:

- A review of block programming and an introduction to text programming.
- Learning about game design in order to build a new board or card game - and a digital version if time.
- Students will be producing a movie about a significant local event or issue.

## Skills and Topics:

- Review of loops, conditionals, variables, functions
- Using For Loops
- Utilizing parameters in functions
- Binary images
- Introduction to python/javascript
- Programming robots with scripted language
- Understand core design elements
- Balancing fun and challenge
- Modifying and revising
- Game Space
- Creating rules
- Creating goals and challenges
- Critiquing board games
- Understanding copyrights
- Brainstorm about local events or issues
- Building a graphic organizer to organize information
- Create a script using Google Docs
- Conducting interviews
- Editing video - splicing, sound editing, inserting text and transitions

## Formative Assessment:

- Teacher observations, code.org progress, daily progress updates,
- Teacher observation, status updates, intermediate deadlines, daily/weekly
- Teacher observation, quizzes/challenges, group progress updates

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*Adopted by the Somerville Board of Education on August 16, 2016*
## Somerville Public Schools

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<tr>
<th>Summative Assessment</th>
<th>Coding project presentation</th>
<th>Game demonstration/presentation</th>
<th>Video presentation</th>
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<tbody>
<tr>
<td>Interdisciplinary Connections</td>
<td>Math: Tanagrams (algorithms)</td>
<td>Art: design of game board, cards, etc.</td>
<td>LAL: script writing, conducting interviews, editing</td>
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<td>Math: Evaluating chance percentages</td>
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<td>SS: Creating themes from history/ real-life elements</td>
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<tr>
<td>Career Readiness Standards</td>
<td>CRP2, CRP4, CRP6, CRP8, CRP11</td>
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<tr>
<td>Modifications/Accommodations</td>
<td>Video tutorials, shortening the code.org levels, structured coding activities (cloze text)</td>
<td>Heterogeneous grouping, video resources, suggested game frameworks, idea list, flexible deadlines</td>
<td>Heterogeneous grouping, suggested topics, video resources, assistance with editing, organizer outlines</td>
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