# GRADE 5 – Unit 1 - Introduction to STEM and Coding

| Mission Statement |
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| The primary goal of the Swedesboro-Woolwich School District is to prepare each student with the real life skills needed to compete in a highly competitive global economy. This will be achieved by providing a comprehensive curriculum, the integration of technology, and the professional services of a competent and dedicated faculty, administration, and support staff.<br><br>Guiding this mission will be Federal mandates, including No Child Left Behind, the New Jersey Core Curriculum Content Standards, and local initiatives addressing the individual needs of our students as determined by the Board of Education. The diverse resources of the school district, which includes a caring PTO and active adult community, contribute to a quality school system. They serve an integral role in supporting positive learning experiences that motivate, challenge and inspire children to learn. |

| Unit/Module Overview |
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| In unit 1, students will learn to:<br>● While practicing a growth mindset, the student will utilize block coding to complete a guided coding course. |

| Standards Covered in Current Unit/Module |
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| Related Standards and Learning Goals |
| **CS.3-5.8.2.5.ED.2 -** Follow step by step directions to assemble a product or solve a problem, using appropriate tools to accomplish the task.<br><br>**CS.3-5.8.1.5.AP.3 -** Create programs that include sequences, events, loops, and conditionals. |

| Unit/Module Weekly Learning Activities and Pacing Guide | | | |
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| **Topic & # Days** | **NJ Standards** | **Critical Knowledge & Skills** | **Possible Resources & Activities** |
| Introduction to STEM (1) | • **CS.3-5.8.2.5.ED.2** | **Obj. We are learning to**:<br>• demonstrate the difference between a growth or fixed mindset<br>**Suggested Formative Assessment(s)**:<br>• Growth and Fixed Mindset quiz | • Activity<br>○ Growth and fixed mindset review<br>○ Review class rules and procedures<br>• Video<br>○ Famous Failures - Never Give Up<br>• Materials<br>○ Growth or Fixed Activity 1<br>○ Kahoot! |
| Introduction to Coding (1) | • **CS.3-5.8.1.5.AP.3** | **Obj. We are learning to**:<br>• create a basic computer program.<br>**Suggested Formative Assessment(s)**:<br>• Progress on Code.org | • Activity<br>○ Introduction to block coding<br>○ Coding pretest evaluation<br>• Video<br>○ What Most Schools Don't Teach<br>• Websites<br>○ https://code.org/ |
| Self-Guided Coding (6) | • **CS.3-5.8.1.5.AP.3** | **Obj. We are learning to**:<br>• Order movement commands as sequential steps in a program.<br>• Modify an existing program to solve errors.<br>• Break down a long sequence of instructions into the largest repeatable sequence.<br>**Suggested Formative Assessment(s)**:<br>• Scale Tracking Sheet Gr 5 Unit 1<br>• Coding Rubric | • Activity<br>○ Complete block coding lessons (self paced with teacher monitoring)<br>• Websites<br>○ https://code.org/ |
| Coding Assessment (1) | • **CS.3-5.8.1.5.AP.3** | **Obj. We are learning to**:<br>• utilize learned coding skills and terms to complete an assessment.<br>**Suggested Summative Assessment(s)**:<br>• https://studio.code.org/hoc/1?section_id=5534446 | • Activity<br>○ Coding final assessment<br>• Websites<br>○ https://code.org/ |

## Link to Additional Components including Cross Curricular Connections, Accommodations, Assessments, Etc

## ELA Enduring Understanding Statements