P.Cert.Grade 8 December Copied from: Grade 8, Copied on: 09/15/21

Content Area: **Technology**
Course(s):
Time Period: **December**
Length: **4-5 Weeks**
Status: **Published**

Unit Overview

Students will participate in Hour of Code.

Enduring Understandings

Coding is the language we use to write programming.

Essential Questions

How do we write efficient code?

Instructional Strategies & Learning Activities

Objective: Hour of Code: code.org (Students Choose from Activities available this week)
The student will be able to begin to learn and understand basic concepts about coding creating code in a "blockly" language which writes Javascript 'under the hood'.***Sequence, Condition, Loop***

Differentiation:
Self-paced

Assessment:
Teacher dashboard reports

Objective: Hour of Code: code.org - complete documentation/screenshot AND Holiday Wish List Google Slide
The student will be able complete documentation/screenshot from last week's Hour of Code then transition into creating one Google Slide which will showcase a new tech item on a Holiday Wish List..

Differentiation:
Student choice: HoC activity, Tech Item

Assessment:

Teacher dashboard reports

Integration of 21st Century Themes and Career Exploration

Students will learn about careers that use coding.

CRP.K-12.CRP1	Act as a responsible and contributing citizen and employee.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
CRP.K-12.CRP4	Communicate clearly and effectively and with reason.
CRP.K-12.CRP5	Consider the environmental, social and economic impacts of decisions.
CRP.K-12.CRP6	Demonstrate creativity and innovation.
CRP.K-12.CRP7	Employ valid and reliable research strategies.
CRP.K-12.CRP8	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP.K-12.CRP9	Model integrity, ethical leadership and effective management.
CRP.K-12.CRP11	Use technology to enhance productivity.
CRP.K-12.CRP12	Work productively in teams while using cultural global competence.
CAEP.9.2.8.B.1	Research careers within the 16 Career Clusters ® and determine attributes of career success.
CAEP.9.2.8.B.4	Evaluate how traditional and nontraditional careers have evolved regionally, nationally, and globally.
CAEP.9.2.8.B.6	Demonstrate understanding of the necessary preparation and legal requirements to enter the workforce.

Technology Integration

See activities above and standards below.

Interdisciplinary Connections

LA.RI.8.1	Cite the textual evidence and make relevant connections that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
LA.RI.8.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts.
LA.RI.8.7	Evaluate the advantages and disadvantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea.
LA.RI.8.10	By the end of the year read and comprehend literary nonfiction at grade level text-complexity or above, with scaffolding as needed.
LA.W.8.1	Write arguments to support claims with clear reasons and relevant evidence.

LA.W.8.6	Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.
LA.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
LA.SL.8.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.
LA.SL.8.5	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.
LA.L.8.1	Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
LA.L.8.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
LA.L.8.4	Determine or clarify the meaning of unknown and multiple-meaning words or phrases based on grade 8 reading and content, choosing flexibly from a range of strategies.
LA.L.8.6	Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Differentiation

Differentiation will be offered as listed in the above activities.

Modifications & Accommodations

IEP and 504 Accommodations will be utilized.

Benchmark Assessments

Teacher made assessments to measure growth.

Formative Assessments

Discussion

Teacher observation

projects

Summative Assessments

Projects

Assessments listed above

Instructional Materials

Materials as needed for projects

Standards

MA.4.MD.C.5b	An angle that turns through n one-degree angles is said to have an angle measure of n degrees.
MA.4.G.A.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
MA.4.G.A.2	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.
MA.4.G.A.3	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
TECH.8.2.5.E.1	Identify how computer programming impacts our everyday lives.
TECH.8.2.5.E.4	Use appropriate terms in conversation (e.g., algorithm, program, debug, loop, events, procedures, memory, storage, processing, software, coding, procedure, and data).
TECH.8.2.5.E.CS1	Computational thinking and computer programming as tools used in design and engineering.
TECH.8.2.8.A.1	Research a product that was designed for a specific demand and identify how the product has changed to meet new demands (i.e., telephone for communication - smart phone for mobility needs).
TECH.8.2.8.B.5	Identify new technologies resulting from the demands, values, and interests of individuals, businesses, industries and societies.