# **Edventures Flight STEAMventures Standards Alignment**

#### **Next Generation Science Standards:\***

- NGSS K-2-ETS1-1: Engineering Design
- NGSS K-2-ETS1-2: Engineering Design
- NGSS K-2-ETS1-3: Engineering Design
- NGSS K-PS2-1: Forces and Motion
- NGSS K-PS2-2. Forces and Motion
- NGSS Core Idea ETS1.A: Defining Engineering Problems

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#### Common Core State Standards for Mathematics:

- CCSS.MATH.CONTENT.K.CC.B.4.B: Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- CCSS.MATH.CONTENT.K.CC.B.4: Understand the relationship between numbers and quantities; connect counting to cardinality.
- CCSS.MATH.CONTENT.K.CC.B.5: Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration.
- CCSS.MATH.CONTENT.K.CC.C.6: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
- CCSS.MATH.CONTENT.K.G.A.1: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- CCSS.MATH.CONTENT.K.G.A.2: Correctly name shapes regardless of their orientations or overall size.
- CCSS.MATH.CONTENT.K.G.B.4: Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
- CCSS.MATH.CONTENT.K.G.B.5: Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- CCSS.MATH.CONTENT.K.MD.A.1: Describe measurable attributes of objects, such as length or weight.
- CCSS.MATH.CONTENT.K.MD.A.2: Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.

- CCSS.MATH.CONTENT.K.MD.B.3: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
- CCSS.MATH.CONTENT.K.OA.A.1: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- CCSS.MATH.CONTENT.K.OA.A.3: Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
- CCSS.MATH.CONTENT.K.OA.A.5: Fluently add and subtract within 5.

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# Common Core State Standards for English Language Arts:

- CCSS.ELA-LITERACY.L.K.1.A: Print many upper- and lowercase letters.
- CCSS.ELA-LITERACY.L.K.5.A: Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
- CCSS.ELA-LITERACY.L.K.5.C: Identify real-life connections between words and their use (e.g., note places at school that are colorful).
- CCSS.ELA-LITERACY.L.K.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts.
- CCSS.ELA-LITERACY.RF.K.1.A: Follow words from left to right, top to bottom, and page by page.
- CCSS.ELA-LITERACY.RF.K.1.B: Recognize that spoken words are represented in written language by specific sequences of letters.
- CCSS.ELA-LITERACY.RF.K.1.D: Recognize and name all upper-and lowercase letters of the alphabet.
- CCSS.ELA-LITERACY.RF.K.3.A: Demonstrate basic knowledge of one-to-one lettersound correspondences by producing the primary sound or many of the most frequent sounds for each consonant.
- CCSS.ELA-LITERACY.RF.K.4: Read emergent-reader texts with purpose and understanding.
- CCSS.ELA-LITERACY.SL.K.1.B: Continue a conversation through multiple exchanges.
- CCSS.ELA-LITERACY.SL.K.2: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- CCSS.ELA-LITERACY.SL.K.4: Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
- CCSS.ELA-LITERACY.SL.K.5: Add drawings or other visual displays to descriptions as desired to provide additional detail.

- CCSS.ELA-LITERACY.SL.K.6: Speak audibly and express thoughts, feelings, and ideas clearly.
- CCSS.ELA-LITERACY.W.K.3: Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.

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## International Society for Technology in Education:

- 1.3.c Curate Information: Students curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.
- 1.3.d Explore Real-World Issues: Students build knowledge by actively exploring real-world issues and problems, developing ideas and theories, and pursuing answers and solutions.
- 1.4.a Design Process: Students know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.
- 1.4.c Prototypes: Students develop, test and refine prototypes as part of a cyclical design process.
- 1.6.b Original and Remixed Works: Students create original works or responsibly repurpose or remix digital resources into new creations.
- 1.6.c Models and Visualizations Students: communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.
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# National Core Arts Standards:

- DA:Cr2.1.PK: Engage in dance experiences moving alone or with a partner.
- DA:Cr3.1.PK: Respond to suggestions for changing movement through guided improvisational experiences.
- DA:Pr4.1.PK: Identify and demonstrate directions for moving the body in general space (for example, forward, backwards, sideways, up, down and turning) and finding and returning to a place in space.
- VA:Cn10.1.Ka: Create art that tells a story about a life experience.

- VA:Cn10.1.Pka: Explore the world using descriptive and expressive words and artmaking.
- VA:Cn11.1.Ka: Identify a purpose of an artwork.
- VA:Cr1.1.Ka: Engage in exploration and imaginative play with materials.
- VA:Cr1.1.Ka: Use various materials and tools to create artworks.
- VA:Cr1.2.PKa: Engage in self directed, creative making.
- VA:Cr1.K: Generate and conceptualize artistic ideas and work.
- VA:Cr2.1.Ka: Through experimentation, build skills in various media and approaches to artmaking.
- VA:Cr2.1.PKa: Use a variety of artmaking tools.
- VA:Cr2.2.PKa: Share materials with others.
- VA:Cr2.3.Ka: Create art that represents natural and constructed environments.
- VA:Cr3.1.PKa: Share and talk about personal artwork.
- VA:Re.7.2.Ka: Describe what an image represents.

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## Habits of Mind:

<u>16 thinking habits</u> developed by Art Costa and Bena Kallick to empower students to succeed in a 21st-century learning environment.

- Persisting:
- Managing Impulsivity
- Listening with Understanding and Empathy
- Thinking Flexibly
- Thinking about Thinking (Metacognition)
- Striving for Accuracy
- Questioning and Posing Problems
- Applying Past Knowledge to New Situations
- Thinking and Communicating with Clarity and Precision
- Gathering Data through All Senses
- Creating, Imagining, Innovating
- Responding with Wonderment and Awe
- Taking Responsible Risks
- Finding Humor
- Thinking Interdependently
- Remaining Open to Continuous Learning

## 21st Century Skills:

A set of widely-applicable abilities essential for success in the information age.

- Communication and Collaboration
- Critical Thinking and Problem Solving
- Information, Media, and Technology Literacy
- Initiative and Self-Direction
- Creativity and Innovation
- Social and Cross-Cultural Skills
- Leadership and Responsibility
- Flexibility and Adaptability
- Productivity and Accountability

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