Take Flight Curriculum Standards

Name of Activity	Mission 1 - Flying Orb Challenge
ISTE Student Standards **Link here**	**1.1 Empowered Learner** Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences. 1.1.d: Students understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies. **1.4 Innovative Designer** Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions. 1.4.d. Students exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems. **1.5 Computational Thinker** Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions. 1.5.c: Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.
Common Core State Standards Mathematical Principles **Link here**	The Standards for Mathematical Practice describe varieties of expertise that mathematics educators at all levels should seek to develop in their students. MP.1 Make sense of problems and persevere in solving them MP.3 Construct viable arguments and critique the reasoning of others MP.6 Attend to precision
Science & Engineering Practices	**Asking Questions & Defining Problems** A practice of science is to ask and refine questions that lead to descriptions and explanations of how the natural and designed world(s) works and which can be empirically tested. Engineering questions clarify problems to determine criteria for successful solutions and identify constraints to solve problems about the designed world. ● Ask questions that require sufficient and appropriate empirical evidence to answer.

***Meet with accommodations** **Link here**	• Ask questions that arise from careful observation of phenomena, models, or unexpected results, to clarify and/or seek additional information. • Ask questions to identify and/or clarify evidence and/or the premise(s) of an argument. • Ask questions to determine relationships between independent and dependent variables and relationships in models.
AASL Standards **Link here**	**I. INQUIRE C** Build new knowledge by inquiring, thinking critically, identifying problems, and developing strategies for solving problems. Learners adapt, communicate, and exchange learning products with others in a cycle that includes: I.C.2 Providing constructive feedback. I.C.3. Acting on feedback to improve. I.D.1 Continually seeking knowledge. I.D.4. Using reflection to guide informed decisions. **II. INCLUDE A** Demonstrate an understanding of and commitment to inclusiveness and respect for diversity in the learning community. Learners contribute a balanced perspective when participating in a learning community by: II.A.1 Articulating an awareness of the contributions of a range of learners. II.B.1 Interacting with learners who reflect a range of perspectives. II.B.2 Evaluating a variety of perspectives during learning activities. II.C.1 Engaging in informed conversation and active debate. II.C.2 Contributing to discussions in which multiple viewpoints on a topic are expressed. II.D.1 Seeking interactions with a range of learners. II.D.2 Demonstrating interest in other perspectives during learning activities. **III. COLLABORATE B** Work effectively with others to broaden perspectives and work toward common goals. Learners participate in personal, social, and intellectual networks by: III.B.1 Using a variety of communication tools and resources. III.B.2 Establishing connections with other learners to build on their own prior knowledge and create new knowledge. III.C.1 Soliciting and responding to feedback from others. III.C.2 Involving diverse perspectives in their own inquiry processes. III.D.1 Actively contributing to group discussions. III.D.2 Recognizing learning as a social responsibility.

	Explore Discover and innovate in a growth mindset developed through experience and reflection. V.B.1 Problem solving through cycles of design, implementation, and reflection. V.B.2 Persisting through self-directed pursuits by tinkering and making. V.C.1 Expressing curiosity about a topic of personal interest or curricular relevance. V.C.3 Collaboratively identifying innovative solutions to a challenge or problem. V.D.1 Iteratively responding to challenges. V.D.2 Recognizing capabilities and skills that can be developed, improved, and expanded. V.D.3 Open-mindedly accepting feedback for positive and constructive growth. **Engage** Demonstrate safe, legal, and ethical creating and sharing of knowledge products independently while engaging in a community of practice and an interconnected world. VI.C.2 Disseminating new knowledge through means appropriate for the intended audience.