MOORESTOWN TOWNSHIP PUBLIC SCHOOLS
MOORESTOWN, NEW JERSEY

Moorestown Upper Elementary School
Gifted and Talented- Challenge

Grade 6

Date : July 2023
Prepared by: Barb Rogers
Supervisor: Dr. Michele Hassall

Contents

Mr. Mark Villanueva, President

Ms. Cheryl Makopoulos, Vice President

Ms. Brooke Mailhiot

Ms. Melissa Arcaro Burns

Ms. Jill Fallows Macaluso

Ms. Danielle Miller

Mr. Maurice Weeks

Ms. Lauren Romano

<u>Administration</u>

Mr. Joe Bollendorf, *Interim Superintendent of Schools*

Dr. Karen Benton, *Director of Curriculum, Instruction, & Innovation*

Dr. David Tate, *Director of Special Education*

Ms. Carole Butler, *Director of Human Resources & Diversity*

Mr. Jeffrey Arey, *Director of Educational Technology*

Mr. James Heiser, *Business Administrator/Board Secretary*

<u>Principals</u>

Mr. Andrew Seibel, *Moorestown High School*

Ms. Cheri Caravano, *William Allen Middle School*

Ms. Susan Powell, *Moorestown Upper Elementary School*

Ms. Michelle Rowe, *George C. Baker School*

Mr. Brian Carter, *Mary E. Roberts School*

Ms. Heather Hackl, *South Valley School*

<u>Supervisors of Curriculum and Instruction</u>

Ms. Jacqueline Brownell, *Language Arts & Media K-12*

Ms. Julie Colby, *Mathematics K- 12*

TBD, *Athletics, Physical Education/Health K-12*

Ms. Kat D'Ambra, *Guidance K-12*

Ms. Leslie Wyers, *Special Education Pre-K – 6*

Ms. Cynthia Moskalow *Special Education 7 – Post Graduation*

Mr. Gavin Quinn, *Science K-12*

Ms. Roseth Rodriguez, *Social Studies & World Languages K – 12*

Ms. Patricia Rowe, *Visual & Performing Arts, Technology & Engineering, Business K-12*

Ms. Leslie Wyers, *Special Education Pre-K – 6*

Course Description and Fundamental Concepts

The goal for the 6th Grade Challenge Program is to cultivate well-rounded and socially aware individuals. Through units of study students will be able to gain a global perspective, emotional intelligence, creative thinking skills, and effective problem-solving strategies. The Challenge Program provides numerous opportunities for students to learn, collaborate, and grow in the following ways.

Key Objectives:

Global Citizenship: Challenge seeks to foster a sense of global citizenship among students. By exposing them to diverse cultures, global issues, and international perspectives, students develop an understanding and appreciation for the interconnectedness of the world.

Emotional Learning: Recognizing the importance of emotional intelligence, Challenge focuses on nurturing students' emotional and social skills.

Creativity: The Challenge Program emphasizes the development of creativity and innovative thinking. Students are encouraged to explore their interests, express their ideas, and think critically beyond conventional boundaries.

Problem Solving: Challenge aims to equip students with strong problem-solving skills by engaging in collaboration with peers, interdisciplinary projects, and real-world scenarios. Students learn to analyze issues from multiple perspectives, identify causes, and create effective strategies to address challenges.

New Jersey Student Learning Standards (NJSLS)

Subject/Content Standards
Include grade appropriate subject/content standards that will be addressed

Standard #	**Standard Description**
NJSLSA.R1.	**Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.**
NJSLSA.R2.	**Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.**
NJSLSA.W1.	**Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.**
NJSLSA.W2.	**Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.**
NJSLSA.W7.	**Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.**
NJSLSA.SL4.	**Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.**
NJSLSA.SL5.	**Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.**

Gifted and Talented Education (National Association for Gifted Children Standards)

Unit	NAGC Standard #	Standard Description
1,3	1.1	*Self-Understanding.* Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.
1,3	1.2	*Self-Understanding.* Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.

1	1.3	*Self-Understanding.* Students with gifts and talents demonstrate understanding of and respect for similarities and differences between themselves and their peer group and others in the general population.
1	1.4	*Awareness of Needs.* Students with gifts and talents access resources from the community to support cognitive and affective needs, including social interactions with others having similar interests and abilities or experiences, including same-age peers and mentors or experts.
1,2,3,4	1.5	*Awareness of Needs.* Students' families and communities understand similarities and differences with respect to the development and characteristics of advanced and typical learners and support students with gifts and talents' needs.
1,2,3,4	1.6	*Cognitive and Affective Growth.* Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.
2,3	1.7	*Cognitive and Affective Growth.* Students with gifts and talents recognize their preferred approaches to learning and expand their repertoire.
1	1.8	*Cognitive and Affective Growth.* Students with gifts and talents identify future career goals that match their talents and abilities and resources needed to meet those goals (e.g., higher education opportunities, mentors, financial support).
	2.1	*Identification.* All students in grades PK-12 have equal access to a comprehensive assessment system that allows them to demonstrate diverse characteristics and behaviors that are associated with giftedness.
1,2,3,4	2.2	*Identification.* Each student reveals his or her exceptionalities or potential through assessment evidence so that appropriate instructional accommodations and modifications can be provided.
1	2.3	*Identification.* Students with identified needs represent diverse backgrounds and reflect the total student population of the district.
2,3	2.4	*Learning Progress and Outcomes.* Students with gifts and talents demonstrate advanced and complex learning as a result of using multiple, appropriate, and ongoing assessments.
	2.5	*Evaluation of Programming.* Students identified with gifts and talents demonstrate important learning progress as a result of programming and services.
1,2,3,4	2.6	*Evaluation of Programming.* Students identified with gifts and talents have increased access and they show significant learning progress as a result of improving components of gifted education programming.
	3.1	*Curriculum Planning.* Students with gifts and talents demonstrate growth commensurate with aptitude during the school year.
	3.2	*Talent Development.* Students with gifts and talents become more competent in multiple talent areas and across dimensions of learning.
	3.3	*Talent Development.* Students with gifts and talents develop their abilities in their domain of talent and/or area of interest.

2,3	3.4	*Instructional Strategies.* Students with gifts and talents become independent investigators.
1	3.5	*Culturally Relevant Curriculum.* Students with gifts and talents develop knowledge and skills for living and being productive in a multicultural, diverse, and global society.
1,2,3,4	3.6	*Resources.* Students with gifts and talents benefit from gifted education programming that provides a variety of high quality resources and materials.
1,2,3,4	4.1	*Personal Competence.* Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.
1,2,3	4.2	*Social Competence.* Students with gifts and talents develop social competence manifested in positive peer relationships and social interactions.
1	4.3	*Leadership.* Students with gifts and talents demonstrate personal and social responsibility and leadership skills.
1,2,3	4.4	*Cultural Competence.* Students with gifts and talents value their own and others' language, heritage, and circumstance. They possess skills in communicating, teaming, and collaborating with diverse individuals and across diverse groups. 1 They use positive strategies to address social issues, including discrimination and stereotyping.
1,2,3	4.5	*Communication Competence.* Students with gifts and talents develop competence in interpersonal and technical communication skills. They demonstrate advanced oral and written skills, balanced biliteracy or multiliteracy, and creative expression. They display fluency with technologies that support effective communication.
1,2,3,4	5.1	*Variety of Programming.* Students with gifts and talents participate in a variety of evidence-based programming options that enhance performance in cognitive and affective areas.
	5.2	*Coordinated Services.* Students with gifts and talents demonstrate progress as a result of the shared commitment and coordinated services of gifted education, general education, special education, and related professional services, such as school counselors, school psychologists, and social workers.
1	5.3	*Collaboration.* Students with gifts and talents' learning is enhanced by regular collaboration among families, community, and the school.
1,4	5.4	*Resources.* Students with gifts and talents participate in gifted education programming that is adequately funded to meet student needs and program goals.
	5.5	*Comprehensiveness.* Students with gifts and talents develop their potential through comprehensive, aligned programming and services.
	5.6	*Policies and Procedures.* Students with gifts and talents participate in regular and gifted education programs that are guided by clear policies and procedures that provide for their advanced learning needs (e.g., early entrance, acceleration, credit in lieu of enrollment).

1,4	5.7	*Career Pathways.* Students with gifts and talents identify future career goals and the talent development pathways to reach those goals.
	6.1	*Talent Development.* Students develop their talents and gifts as a result of interacting with educators who meet the national teacher preparation standards in gifted education.
	6.2	*Socio-emotional Development.* Students with gifts and talents develop socially and emotionally as a result of educators who have participated in professional development aligned with national standards in gifted education and National Staff Development Standards.
1,2,3,4	6.3	*Lifelong Learners.* Students develop their gifts and talents as a result of educators who are life-long learners, participating in ongoing professional development and continuing education opportunities.
1,2,3,4	6.4	*Ethics.* Students develop their gifts and talents as a result of educators who are ethical in their practices.

<mark>(ADD UNIT #(s) INTO CHART)</mark> *Crosswalk with old Careers Chart*

Career Awareness, Exploration, Preparation, and Training ([Standard 9.2](#))   *List appropriate units below for which standards will be addressed*

By Grade 5		
Unit Addressed	**Core Idea**	**Standard / Description**
1,2,3,4	An individual's passions, aptitude and skills can affect his/her employment and earning potential.	*9.2.5.CAP.1: Evaluate personal likes and dislikes and identify careers that might be suited to personal likes.* *9.2.5.CAP.2: Identify how you might like to earn an income.* *9.2.5.CAP.3: Identify qualifications needed to pursue traditional and non-traditional careers and occupations.* *9.2.5.CAP.4: Explain the reasons why some jobs and careers require specific training, skills, and certification (e.g., life guards, child care, medicine, education) and examples of these requirements.*
	Income and benefits can vary depending on the employer and type of job or career.	*9.2.5.CAP.5: Identify various employee benefits, including income, medical, vacation time, and lifestyle benefits provided by different types of jobs and careers.*
	There are a variety of factors to consider before starting a business.	*9.2.5.CAP.6: Compare the characteristics of a successful entrepreneur with the traits of successful employees.* •

		9.2.5.CAP.7: *Identify factors to consider before starting a business.*
	Individuals can choose to accept inevitable risk or take steps to protect themselves by avoiding or reducing risk.	9.2.5.CAP.8: *Identify risks that individuals and households face.* 9.2.5.CAP.9: *Justify reasons to have insurance.*

==(ADD UNIT #(s) INTO CHART)== *Crosswalk with old Technology Chart*

Life Literacies and Key Skills (Standard 9.4)
List appropriate units below for which standards will be addressed

By Grade 5		
Unit Addressed	**Core Idea**	**Standard / Description**
1,2,3,4	**Creativity and Innovation**: Collaboration with individuals with diverse perspectives can result in new ways of thinking and/or innovative solutions.	9.4.5.CI.1: *Use appropriate communication technologies to collaborate with individuals with diverse perspectives about a local and/or global climate change issue and deliberate about possible solutions (e.g., W.4.6, 3.MD.B.3,7.1.NM.IPERS.6).* 9.4.5.CI.2: *Investigate a persistent local or global issue, such as climate change, and collaborate with individuals with diverse perspectives to improve upon current actions designed to address the issue (e.g., 6.3.5.CivicsPD.3, W.5.7).*
1,2,3,4	**Creativity and Innovation**: Curiosity and a willingness to try new ideas (intellectual risk-taking) contributes to the development of creativity and innovation skills.	9.4.5.CI.3: *Participate in a brainstorming session with individuals with diverse perspectives to expand one's thinking about a topic of curiosity (e.g., 8.2.5.ED.2, 1.5.5.CR1a).* 9.4.5.CI.4: *Research the development process of a product and identify the role of failure as a part of the creative process (e.g., W.4.7, 8.2.5.ED.6).*
1,2,3,4	**Critical Thinking and Problem-solving:** The ability to solve problems effectively begins with gathering data, seeking resources, and applying critical thinking skills.	9.4.5.CT.1: *Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).* 9.4.5.CT.2: *Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).*

		9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems. *9.4.5.CT.4*: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).
	Digital Citizenship: Intellectual property rights exist to protect the original works of individuals. It is allowable to use other people's ideas in one's own work provided that proper credit is given to the original source.	*9.4.5.DC.1*: Explain the need for and use of copyrights. *9.4.5.DC.2*: Provide attribution according to intellectual property rights guidelines using public domain or creative commons media. *9.4.5.DC.3*: Distinguish between digital images that can be reused freely and those that have copyright restrictions.
	Digital Citizenship: Sending and receiving copies of media on the internet creates the opportunity for unauthorized use of data, such as personally owned video, photos, and music.	*9.4.5.DC.4*: Model safe, legal, and ethical behavior when using online or offline technology (e.g., 8.1.5.NI.2).
	Digital Citizenship: Digital identities must be managed in order to create a positive digital footprint.	*9.4.5.DC.5*: Identify the characteristics of a positive and negative online identity and the lasting implications of online activity
	Digital Citizenship: Digital tools have positively and negatively changed the way people interact socially.	*9.4.5.DC.6*: Compare and contrast how digital tools have changed social interactions (e.g., 8.1.5.IC.1). *9.4.5.DC.7*: Explain how posting and commenting in social spaces can have positive or negative consequences.
	Digital Citizenship: Digital engagement can improve the planning and delivery of climate change actions.	*9.4.5.DC.8*: Propose ways local and global communities can engage digitally to participate in and promote climate action (e.g., 6.3.5.GeoHE.1).
	Global and Cultural Awareness: Culture and geography can shape an individual's experiences and perspectives.	*9.4.5.GCA.1*: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).

	Information and Media Literacy: Digital tools and media resources provide access to vast stores of information, but the information can be biased or inaccurate.	*9.4.5.IML.1: Evaluate digital sources for accuracy, perspective, credibility and relevance (e.g., Social Studies Practice - Gathering and Evaluating Sources).*
	Information and Media Literacy: Digital tools can be used to modify and display data in various ways that can be organized to communicate ideas.	*9.4.5.IML.2: Create a visual representation to organize information about a problem or issue (e.g., 4.MD.B.4, 8.1.5.DA.3).* *9.4.5.IML.3: Represent the same data in multiple visual formats in order to tell a story about the data.*
1,3	**Information and Media Literacy:** Accurate and comprehensive information comes in a variety of platforms and formats and is the basis for effective decision-making.	*9.4.5.IML.4: Determine the impact of implicit and explicit media messages on individuals, groups, and society as a whole.* *9.4.5.IML.5: Distinguish how media are used by individuals, groups, and organizations for varying purposes. (e.g., 1.3A.5.R1a).*
	Information and Media Literacy: Specific situations require the use of relevant sources of information.	*9.4.5.IML.6: Use appropriate sources of information from diverse sources, contexts, disciplines, and cultures to answer questions (e.g., RI.5.7, 6.1.5.HistoryCC.7, 7.1.NM. IPRET.5).* *9.4.5.IML.7: Evaluate the degree to which information meets a need including social emotional learning, academic, and social (e.g., 2.2.5. PF.5).*
2,4	**Technology Literacy:** Different digital tools have different purposes.	*9.4.5.TL.1: Compare the common uses of at least two different digital tools and identify the advantages and disadvantages of using each.* *9.4.5.TL.2: Sort and filter data in a spreadsheet to analyze findings.* *9.4.5.TL.3: Format a document using a word processing application to enhance text, change page formatting, and include appropriate images, graphics, or symbols.*
1,3	**Technology Literacy:** Collaborating digitally as a team can often develop a better artifact than an individual working alone.	*9.4.5.TL.4: Compare and contrast artifacts produced individually to those developed collaboratively (e.g., 1.5.5.CR3a).* *9.4.5.TL.5: Collaborate digitally to produce an artifact (e.g., 1.2.5CR1d).*

Interdisciplinary Connections (2020 NJSLS)
List any other content standards addressed as well as appropriate units. All arts integration connections may be listed within this chart.

Visual & Performing Arts Integration (Standard 1) *Crosswalk with old VPA Integration Chart*
List appropriate units below for which standards (1.1 through 1.5) may be addressed

Unit Addressed	Artistic Process	Anchor Standard
1,2,3,4	**Creating**	*Anchor Standard 1: Generating and conceptualizing ideas.* *Anchor Standard 2: Organizing and developing ideas.* *Anchor Standard 3: Refining and completing products.*
1,2,3,4	**Connecting**	*Anchor Standard 10: Synthesizing and relating knowledge and personal experiences to create products.* *Anchor Standard 11: Relating artistic ideas and works within societal, cultural, and historical contexts to deepen understanding.*
1,3,4	**Performing/ Presenting/ Producing**	*Anchor Standard 4: Selecting, analyzing, and interpreting work.* *Anchor Standard 5: Developing and refining techniques and models or steps needed to create products.* *Anchor Standard 6: Conveying meaning through art.*
1,4	**Responding**	*Anchor Standard 7: Perceiving and analyzing products.* *Anchor Standard 8: Applying criteria to evaluate products.* *Anchor Standard 9: Interpreting intent and meaning.*

Pacing Guide (All Dates are approximate based on the school calendar)

Unit/ Topic	Month (w/Approx number of Teaching Days)
Unit 1 pt 1- Introduce Apple Challenge for a Change Community Project: Students decide and plan the project.	**September (~5 days)**
Unit 2- Build and Solve Your Own Breakout Rooms.	**October (~5 days)**
Unit 2- Build and Solve Your Own Breakout Rooms.	**November (~4 days)**
Unit 3-Build Your Own STEAM activity to teach and share.	**December (~4 days)**
Unit 3-Teach and Share Your Own STEAM activity.	**January (~5 days)**
Unit 1 pt 2- Apple Challenge for a Change Community Project: Students select class leaders and organize the project.	**February (~5 days)**
Unit 1 pt 3- Apple Challenge for a Change Community Project: Students complete the project.	**March (~5 days)**
Unit 4 pt 1- Students learn how to design 3D objects using a 3D design program.	**April (~5 days)**
Unit 4 pt 2- Students design and build 5 original game pieces to represent themselves.	**May (~5 days)**
Unit 4 pt 3- 3D printed pieces are printed and painted.	**June (~4 days)**

Unit Name: Apple Challenge for a Change Community Project

Learning Goals: What do I want my students to learn?

Standards

NJSLS -
NJSLSA.R1.
Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.R2.
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
NJSLSA.W1.
Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.
Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W7.
Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.
NJSLSA.SL4.
Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
 NJSLSA.SL5.
 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

NJSLS - Career Awareness, Exploration, Preparation, and Training
NJSLS - Life Literacies and Key Skills
NJSLS - Interdisciplinary Standards

Fundamental Concepts / Big Ideas

- Through this unit students will put their efforts to work by thinking of others in their community. Through conversation, brainstorming, and voting, students will select a project to complete later in the year that will improve their community. They will plan and organize their ideas and complete any work necessary to make this project a reality.

- The second part of this unit will implement the ideas and materials needed to complete this community project.

Learning Objectives

Students will be able to…

- Focus on the needs of others.
- Brainstorm ideas that will help their community that are reasonable and accomplishable.
- Democratically vote on their ideas and accept the solution.
- Work together to organize a plan to complete the project.
- Work the plan they have developed and adjust to any changes necessary.
- Cooperate as an individual class and as a pair of classes to share the responsibility and workload.
- Complete the project in the time period given.

Unit Name: Build and Solve Your Own Breakout Rooms.

Learning Goals: What do I want my students to learn?

Standards

[NJSLS](#) -
NJSLSA.R1.
Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.R2.
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
NJSLSA.W1.
Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.
Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W7.
Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.
NJSLSA.SL4.
Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
 NJSLSA.SL5.
 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

[NJSLS - Career Awareness, Exploration, Preparation, and Training](#)
[NJSLS - Life Literacies and Key Skills](#)
[NJSLS - Interdisciplinary Standards](#)

Fundamental Concepts / Big Ideas

- Through this unit students will work in groups of 3 to build Escape Rooms utilizing the materials from the Breakout EDU program. Students will need to work backwards to create a multi-part lock puzzle for their peers to solve.

Learning Objectives

Students will be able to…

- Create puzzles that yield solutions that match the format of the locks. (3-,4-digits, arrows, and letters).
- Create different genres of puzzles including word, math, riddles, etc.
- Write the puzzles using language understandable to solvers.
- Create puzzles that are neither too easy or difficult for the class.
- Solve each other's breakout room challenges.

Unit Name: Build Your Own STEAM activity to teach and share.

Learning Goals: What do I want my students to learn?

Standards

NJSLS -
NJSLSA.R1.
Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.R2.
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
NJSLSA.W1.
Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.
Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W7.
Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation.
NJSLSA.SL4.
Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
 NJSLSA.SL5.

Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

NJSLS - Career Awareness, Exploration, Preparation, and Training
NJSLS - Life Literacies and Key Skills
NJSLS - Interdisciplinary Standards

Fundamental Concepts / Big Ideas

● Through this unit students will work in groups of 4 determined by topic interest. Each group will select one of the parts of STEAM and create a fun interactive activity for their peers to engage in and learn more about.

Learning Objectives

Students will be able to…
● Research and create a small interactive project for their peers to engage with and learn more about the subjects in the STEAM curriculum.
● Engage with their peers during the activities they have designed.

Unit Name: Students learn how to design 3D objects using a 3D design program.

Learning Goals: What do I want my students to learn?

Standards

NJSLS -
NJSLSA.R1.
Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
NJSLSA.R2.
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
NJSLSA.W1.
Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.
Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W7.

Conduct short as well as more sustained research projects, utilizing an inquiry-based research process, based on focused questions, demonstrating understanding of the subject under investigation. NJSLSA.SL4.
Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience. NJSLSA.SL5.
Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.

NJSLS - Career Awareness, Exploration, Preparation, and Training
NJSLS - Life Literacies and Key Skills
NJSLS - Interdisciplinary Standards

Fundamental Concepts / Big Ideas

- Through this unit students will self-reflect and choose 5 ideas that represent themselves. They will then learn how to use a 3D design program then create these ideas as 3D game pieces. Once designed on Tinkercad, each prototype will be printed on a Prusa 3D printer and adjustments will be made, if needed. The pieces will be painted by the students and then be used to play games in the class.

Learning Objectives

Students will be able to…
- Make a list of objects to make to represent their personality.
- Use Tinkercad software to build prototype miniature versions of their objects.
- Adjust and edit a 3D design program file if necessary.
- Output files to be used by Prusa printer.
- Clean up prints and paint the 5 pieces.

Please contact the Content Supervisor for any questions.