

Curriculum Development Timeline

School: Township of Ocean Elementary Schools

Course: Gifted and Talented, Grade 3

Department: Gifted and Talented

Board Approval	Supervisor	Notes
August 2009	Jessica Shaw	Update Standards
August 2013	Christine Picerno	Update Standards
December 2017	Christine Picerno	Update Standards
August 2021	Rich Steckhahn	Revisions



Township of Ocean Pacing Guide			
Week	Marking Period 1	Week	Marking Period 3
1	Beginning Engineering	21	Logic Puzzles
2	Beginning Engineering	22	Logic Puzzles
3	Beginning Engineering	23	Logic Puzzles
4	Beginning Engineering	24	Logic Puzzles
5	Beginning Engineering	25	Logic Puzzles
6	Beginning Engineering	26	Logic Puzzles
7	Beginning Engineering	27	Logic Puzzles
8	Beginning Engineering	28	Logic Puzzles
9	Beginning Engineering	29	Logic Puzzles
10	Beginning Engineering	30	Logic Puzzles
Week	Marking Period 2	Week	Marking Period 4
11	Beginning Engineering	31	Ocean Animal Stories
12	Beginning Engineering	32	Ocean Animal Stories
13	Beginning Engineering	33	Ocean Animal Stories
14	Beginning Engineering	34	Ocean Animal Stories
15	Beginning Engineering	35	Ocean Animal Stories
16	Beginning Engineering	36	Ocean Animal Stories
17	Beginning Engineering	37	Ocean Animal Stories
18	Beginning Engineering	38	Ocean Animal Stories
19	Beginning Engineering	39	Ocean Animal Stories
20	Beginning Engineering	40	Ocean Animal Stories



Core Instructional & Supplemental Materials including various levels of Texts

Lego Kits, STEAM consumables, Logic Puzzles

Time Frame	1st and 2nd Marking Period
Topic	
Beginning Engineering	
Alignment to Standards	
TECH.8.1.5.A -Students demonstrate a sound understanding of technology concepts, systems and operations TECH.8.1.5.B - Students demonstrate creative thinking, construct knowledge and develop innovative products and processes using technology. TECH.8.2.5.A - Technology systems impact every aspect of the world in which we live. TECH.8.2.5.B - Knowledge and understanding of human, cultural and society values are fundamental when designing technology systems and products in the global society. TECH.8.2.5.C - The design process is a systematic approach to solving problem TECH.8.2.5.D - The designed world is the product of a design process that provides the means to convert resources into products and systems. TECH.8.2.5.E - Computational thinking builds and enhances problem solving, allowing students to move beyond using knowledge to create	
Learning Objectives and Activities	
<i>Students will understand that...</i> • The engineering design process identifies a need or problem and must be completed through steps in a designed order. • Hands-on experiences promote cooperative learning through finding relationships, and organizing information. • Nature and technology have an impact on the world as they relate to society. • Perseverance is a skill honed through time. <i>Activities...</i> • Wizardsing STEM project • Lego Robots • Little Bits • Gizmos & Gadgets • Straw siphons • Pantographs • Cooperative group work mini-challenges	



Assessments

Formative:

- Self assessment
- Peer critique
- Teacher observation (anecdotal notes)
- Oral responses

Summative:

- Rubrics (including criteria for content, processing skills, and collaborative effort.)

Interdisciplinary Connections

NJSLS: Computer Science and Design Thinking

- 8.1.5.AP.3: Create programs that include sequences, events, loops, and conditionals.
- 8.1.5.AP.6: Develop programs using an iterative process, implement the program design, and test the program to ensure it works as intended.

Career Readiness, Life Literacies, and Key Skills

Technology Integration

- 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).

Career Education

- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Time Frame	3rd Marking Period
Topic	
Logic Puzzles	
TECH.8.1.5.B.CS1 - Apply existing knowledge to generate new ideas, products, or processes.	



TECH.8.1.5.F - Critical thinking, problem solving, and decision making: Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

TECH.8.2.5.C.4 - Collaborate and brainstorm with peers to solve a problem evaluating all solutions to provide the best results with supporting sketches or models.

MA.3.OA.A.3 - Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.

MA.3.OA.D.8 - Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

MA.3.MD.D.8 - Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Learning Objectives and Activities

Students will understand that...

- Hands-on experiences promote cooperative learning through finding relationships and organizing information.
- Developing critical and divergent thinking, and deductive and spatial reasoning happens through working with various puzzles.
- Perseverance is a skill honed through time.

Activities...

- Noodlers
- Word Beggars
- IQ Twist
- Stories with Holes
- Ken-Ken
- [Mensa for Kids Games](#)
- [24game.com](#)
- [Chess- online](#)

Assessments

Formative:

- Observational
- Self-assessment-individual critique
- Progressive task improvement

Summative:



• Rubric based (O, G, S, N) • Student develop logic puzzle
Interdisciplinary Connections
Career Readiness, Life Literacies, and Key Skills
Technology Integration
• 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.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).
Career Education
• CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Time Frame	4th Marking Period
Topic	
Ocean Animal Stories	
Alignment to Standards	
LA.W.3.4 - With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.) LA.W.3.5 - With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. LA.L.3.1 - Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. LA.W.3.6 - With guidance and support from adults, use technology to produce and publish writing as well as to interact and collaborate with others. MA.K-2.1.2.2.Pr4a - With guidance and moving towards independence, combine art forms and media content into media artworks such as an illustrated story or narrated animation.	
Learning Objectives and Activities	
<i>Students will understand that...</i>	



- The Writing Process is a series of steps: Prewriting, Drafting, Editing, Revising, and Publishing.
- Completing the steps of the writing process are required for good writing.
- Using graphic organizers helps align information needed in writing piece.
- Rubric outlines provide requirements for project and final writing piece.
- An original illustration is needed for a successful project.

Activities...

- Students will use class time to find ten animal facts to use in writing a realistic fiction story.
- Students will create a problem and solution using the writing process.
- Students will peer edit and revise writing.
- Students will illustrate the story with original artwork.
- Students will publish a story and present the final draft in a “reading”.

Assessments**Formative:**

- Self assessment
- Individual critique
- Peer conferences
- Teacher/student conferences.

Summative:

- Writing rubric

Interdisciplinary Connections**Career Readiness, Life Literacies, and Key Skills****Technology Integration**

- 9.4.5.IML.1: Evaluate digital sources for accuracy, perspective, credibility and relevance (e.g., Social Studies Practice - Gathering and Evaluating Sources).
- 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.

Career Education

- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.



Modifications (ELL, Special Education, At Risk Students, Gifted & Talented, & 504 Plans)**ELL:**

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher models reading aloud daily
- Provide peer tutoring
- Use of Bilingual Dictionary
- Guided notes and/or scaffold outline for written assignments
- Provide students with English Learner leveled readers.

Supports for Students With IEPs:

- Allow extra time to complete assignments or tests
- Guided notes and/or scaffold outline for written assignments
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications

At-Risk Students:

- Guided notes and/or scaffold outline for written assignments
- Introduce key vocabulary before lesson
- Work in a small group
- Lesson taught again using a differentiated approach
- Allow answers to be given orally or dictated
- Use visuals / Anchor Charts
- Leveled texts according to ability

Supports for Students With 504 Plans:

- Follow all the 504 plan modifications
- Text to speech/audio recorded selections
- Amplification system as needed
- Leveled texts according to ability
- Fine motor skill stations embedded in rotation as needed
- Modified or constrained spelling word lists
- Provide anchor charts with high frequency words and phonemic patterns

