

**Course Title:**

Discovery

**Length:**

Full Year

Grade 3

**Primary Content:**

Gifted & Talented

**Schools:**

Washington

Lincoln

**Initial Approval Date:**

June 15, 2015

Revised: June 27, 2022

**Embedded Content:**

Career Readiness, Life Literacies and Key Skills

**Initial BOE Approval Date (Born on):**

June 27, 2022

**RUTHERFORD PUBLIC SCHOOLS**  
**Rutherford, New Jersey**

**GIFTED AND TALENTED DEPARTMENT**

**DISCOVERY CURRICULUM - GRADES 3**

**1. Introduction/Overview/Philosophy**

The Discovery Program is a pull-out program where identified students have the opportunity to refine higher level thinking skills. The program offers students opportunities to participate in a variety of advanced and challenging learning experiences in language arts, math, and the content areas. Students are exposed to a sequential development of advanced thinking skills and are required to complete an independent project utilizing the skills and thought processes developed during participation in the Discovery Program.

The Third Grade Discovery Program is designed to:

- augment the acquisition of independent thinking and learning skills taught in the Enrichment Program.
- reinforce and refine critical thinking, creativity and communication skills.
- cultivate a real joy in the discovery of new concepts.
- broaden the students' range of interests through interaction in creative problem solving and divergent thinking.
- develop affective processes such as sensing, appreciating, and valuing.
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**2. Objectives**

**A. Curriculum Objectives for Discovery- New Jersey Student Learning Standards**

Students will be able to refine and broaden

1. Divergent thinking
  - a. Creative thinking
  - b. Inventive thinking
2. Convergent thinking
  - a. Deductive thinking
  - b. Analytical thinking
  - c. Evaluative thinking
3. Visual/spatial perception
4. Interpretive thinking
5. Problem solving
6. Research skills

1. In the area of **divergent thinking**, students will:

- a. use **creative thinking** to:
  1. use fluent and flexible thinking to brainstorm ideas/solutions.

2. adapt story versions.
  3. create word play.
  4. illustrate interpretations.
  5. design puzzles.
  6. create and construct original designs with a variety of manipulatives and art supplies.
  7. design and sew a square of a quilt.
- b. use **inventive thinking** to:
1. use fluent and flexible thinking to brainstorm ideas/solutions.
  2. use forced association to generate inventive ideas.
  3. invent to solve a problem.
  4. adapt items to be used for an alternate purpose.
2. In the area of **convergent thinking**, students will:
- a. use **deductive thinking** to:
1. formulate predictions/hypotheses.
  2. determine sets according to attributes.
  3. solve a variety of visual and geometric puzzles.
  4. organize clues and eliminate unrelated clues to determine a solution.
- b. use **analytical thinking** to:
1. analyze story elements of fairy tales/folk tales/nursery rhymes.
  2. compare and contrast story elements/manipulatives/interpretations.
  3. interpret and use figural language.
  4. interpret visual representations.
  5. sort and classify through attribute activities.
  6. determine constructions of tangrams, pattern blocks, and geoboards.
  7. use a variety of manipulatives to solve mathematical functions.
- c. use **evaluative thinking** to:
1. judge character traits and motivation.
  2. compare, rate, and rank information.
  3. determine cause and effect.
  4. make conclusions about given information.
  5. defend perspectives.
3. In the area of **visual/spatial perception**, students will:
- a. solve a variety of visual and geometric puzzles.
  - b. identify attributes of geometric figures.
  - c. represent through concrete symbols.
  - d. interpret optical illusions.
  - e. use concrete manipulatives to construct visual products.
  - f. elaborate figural forms.
4. In the area of **interpretive thinking** students will:
- a. use Shared Inquiry to:
1. build awareness of interpretive issues in a story.
  2. analyze character motivation and development.

3. find and use supporting evidence for opinions.
  4. present clear, persuasive arguments.
5. In the area of **problem solving**, students will:
- a. use the creative problem-solving process to:
    1. fact find - sort out what facts are relevant to the problem and what information is lacking.
    2. determine problem - analyze the situation and define the “real problem.”
    3. find solutions - think of creative ways to solve the problem.
    4. judge ideas - use criteria to select the best idea.
    5. determine a plan of action - plan how to implement the selected solution.
  - b. use Common Core Mathematical Practices to:
    1. make sense of problems and persevere in solving them.
    2. reason abstractly and quantitatively.
    3. construct viable arguments and critique the reasoning of others.
    4. model with mathematics.
    5. use appropriate tools strategically.
    6. attend to precision.
    7. look for and make use of structure.
    8. look for and express regularity in repeated reasoning.
6. In the area of **research skills** students will:
- a. determine purpose, goals, and activities of self-selected independent study projects.
  - b. access and select meaningful information using the Internet, books, videos, and other media.
  - c. use the five-step writing process of prewriting, drafting, editing, conferencing, and publishing for a variety of audiences and purposes.
  - d. use a variety of computer software to record research.
  - e. synthesize knowledge of a topic into culminating activities.
  - f. cite references.
  - g. present/share research with others.

**B. New Jersey Student Learning Standards – English Language Arts**

Grade 3:

Reading Standards for Literature. RL.3

Key Ideas and Details

- RL.3.1. With prompting and support, ask and answer questions about key details in a text.
- RL.3.2. With prompting and support, retell familiar stories, including key details.
- RL.3.3. With prompting and support, identify characters, settings, and major events in a story.

## Craft and Structure

RL.3.6. With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.

## Reading Standards for Informational Text. RI.3

### Key Ideas and Details

- RI.3.1. With prompting and support, ask and answer questions about key details in a text.
- RI.3.2. With prompting and support, identify the main topic and retell key details of a text.
- RI.3.3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

### Craft and Structure

- RI.3.4. With prompting and support, ask and answer questions about unknown words in a text.
- RI.3.5. Identify the front cover, back cover, and title page of a book.
- RI.3.6. Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.

### Integration of Knowledge and Ideas

- RI.3.7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).
- RI.3.8. With prompting and support, identify the reasons an author gives to support points in a text.

## Reading Standards: Foundational Skills RF.3

By the end of Grade 5

- RF.3.4. Read with sufficient accuracy and fluency to support comprehension.
  - a. text with purpose and understanding.
  - b. prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
  - c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

## Writing Standards W.3

### Text Types and Purposes

- W.3.1. Write opinion pieces on topics or texts, supporting a point of view with reasons.
  - a. Introduce the topic or text they are writing about, state an opinion, and create

an organizational structure that lists reasons.

- b. Provide reasons that support the opinion.
- c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.

- d. Provide a concluding statement or section.

W.3.2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

- a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.

- b. Develop the topic with facts, definitions, and details.

- c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.

- d. Provide a concluding statement or section.

W.3.3. Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

- a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally.

- b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.

- c. Use temporal words and phrases to signal event order.

#### Production and Distribution of Writing

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.)

W.3.5. With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language Standards 1–3 up to and including grade 3.)

W.3.6. With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.

#### Research to Build and Present Knowledge

W.3.7. Conduct short research projects that build knowledge about a topic.

W.3.8. Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories

#### Range of Writing

W.3.10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

## Speaking and Listening NJSLS. SL.3

### Comprehension and Collaboration

SL.3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).

c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.

d. Explain their own ideas and understanding in light of the discussion.

SL.3.2. Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

SL.3.3. Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

### Presentation of Knowledge and Ideas

SL.3.4. Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

SL.3.5. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.

SL.3.6. Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language Standards 1 and 3 on pages 28 and 29 for specific expectations.)

### Vocabulary Acquisition and Use NJSLS: L.3

L.3.5. Demonstrate understanding of word relationships and nuances in word meanings.

a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps).

b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).

c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).

L.3.6. Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).

## Mathematics

Grade 3:

### Operations and Algebraic Thinking NJSLS 3.OA

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

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.

3.OA.D.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.

### Geometry NJSLS 3.G

Reason with shapes and their attributes.

3.G.A.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

3.G.A.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as  $1/4$  of the area of the shape.*

### Measurement and Data 3.MD

- A. • Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- B. • Represent and interpret data.
- C. • Geometric measurement: understand concepts of area and relate area to multiplication and to addition. • Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.

### Geometry 3.G

- Reason with shapes and their attributes.



**Geometric measurement:** understand concepts of area and relate area to multiplication and to addition. Recognize area as an attribute of plane figures and understand concepts of area measurement.

**Geometry 3.G A.** Reason with shapes and their attributes.

1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.

2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as  $\frac{1}{4}$  of the area of the shape.

**COMPUTER SCIENCE AND DESIGN THINKING NJSLs: 8.1**

**8.1.2.AP.1** Model daily processes by creating and following algorithms to complete tasks.

**8.1.2.AP.5** Describe a program's sequence of events, goals, and expected outcomes.

**8.1.5.AP.1** Compare and refine multiple algorithms for the same task and determine which is the most appropriate.

**Visual and Performing Arts NJSLs: 1.2 Media Arts**

● 1.2.5.Cr1a: Generate ideas for media artwork, using a variety of tools, methods and/or materials.

● 1.2.5.Cr1b: Develop individual and collaborative artistic goals for media artwork using a variety of methods.

● 1.2.5.Cr1c: Connect media artwork to personal experiences and the work of others.

● 1.2.5.Cr1d: Collaboratively form ideas, plans, and models to prepare for media artwork.

● 1.2.5.Cr1e: Model ideas and plans in an effective direction.

● 1.2.5.Cr1f: Brainstorm goals and plans for a media art audience.

● 1.2.5.Cr3c: Explore how elements and components can be altered for clear communication and intentional effects, point of view, perspective, and refine media artworks to improve clarity and purpose.

**Skills**

1. Apply basic domain-specific arts language to communicate personal responses to dance, theater, music, and visual art.
2. Compare and contrast works of art that communicate significant cultural meanings.
3. Apply qualitative terms when responding to works of art.
4. Create an arts experience that communicates a significant emotion or feeling.

**Career Readiness, Life Literacies, and Key Skills NJSL: 9.4 Life Literacies and Key Skills  
by the End of Grade 5**

**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.

**Information and Media Literacy**

**9.4.5.IML.2** Create a visual representation to organize information about a problem or issue.

**Digital Citizenship**

**9.4.5.DC.4** Model safe, legal, and ethical behavior when using online or offline technology.

**9.4.5.DC.5** Identify the characteristics of a positive and negative online identity and the lasting implications of online activity.

**Individuals from different cultures may have different points of view and experiences.**

9.4.5.GCA:1: Articulate the role of culture in everyday life by describing one's own culture and comparing it to the cultures of other individuals

**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
- 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

**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
- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources
- 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

**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

- 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
- 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
- 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
- 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
- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process
- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources that can aid in solving the problem
- 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

**Different digital tools have different purposes.**

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.

Collaborating digitally as a team can often develop a better artifact than an individual working alone.

9.4.5.TL.5: Collaborate digitally to produce an artifact. (e.g., 1.2.5CR1d).

**Science**

**3-5-ETS1: Engineering Design Students who demonstrate understanding can:**

- 3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

**5-ESS3: Earth and Human Activity. Students who demonstrate understanding can:**

**5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources, environment, and address climate change issues.**

- ETS1: Engineering Design
- ETS1.A: Defining and Delimiting an Engineering Problem

- ETS1.B: Developing Possible Solutions
- ETS1.C: Optimizing the Design Solution

**3-LS3: Heredity: Inheritance and Variation of Traits Students who demonstrate understanding can:**

- 3-LS3-1 Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.
- 3-LS3-2 Use evidence to support the explanation that traits can be influenced by the environment.

**3-5-ETS1: Engineering Design Students who demonstrate understanding can:**

- 3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
  - 3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
  - 3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

**2020 New Jersey Student Learning Standards – Social Studies 6.1 U.S. History: America in the World by the End of Grade 5**

• 6.1.2.Civics

PR.1: Determine what makes a good rule or law.

- 6.1.2.CivicsPR.2: Cite evidence that explains why rules and laws are necessary at home, in schools, and in communities.

• 6.1.2.Civics

PR.3: Analyze classroom rules and routines and describe how they are designed to benefit the common good.

PR.4: Explain why teachers, local community leaders, and other adults have a responsibility to make rules that are fair, consistent, and respectful of individual rights.

- 6.1.2.Geo.GI.1: Explain why and how people, goods, and ideas move from place to place.

- 6.1.2.Geo.GI.2: Use technology to understand the culture and physical characteristics of regions.

- 6.1.2.HistoryCC.1: Use multiple sources to create a chronological sequence of events that describes how and why your community has changed over time.

## 2020 New Jersey Student Learning Standards - Visual and Performing Arts: 1.2 Media Arts Standards by the End of Grade 5

The practices reflect the steps that artists undergo in the process of creating, performing, responding and connecting to works of art (i.e., the artistic processes). To become artistically literate, it is essential that students are provided with the type of learning experiences that will enable them to engage in these practices as part of their art making processes. The practices are indicated in the chart below. (Note: there are subtle differences in the practices that reflect the nuances of each of the respective arts disciplines.)

Practices

Dance	Music	Theatre	Visual Art	Media Arts
<b>Creating:</b> <ul style="list-style-type: none"> <li>• Explore</li> <li>• Plan</li> <li>• Revise</li> </ul>	<b>Creating:</b> <ul style="list-style-type: none"> <li>• Imagine</li> <li>• Plan, Make</li> <li>• Evaluate, Refine</li> </ul>	<b>Creating:</b> <ul style="list-style-type: none"> <li>• Imagine, Envision</li> <li>• Plan, Construct</li> <li>• Evaluate, Clarify, Realize</li> </ul>	<b>Creating:</b> <ul style="list-style-type: none"> <li>• Explore</li> <li>• Investigate</li> <li>• Reflect, Refine, Continue</li> </ul>	<b>Creating:</b> <ul style="list-style-type: none"> <li>• Conceive</li> <li>• Develop</li> <li>• Construct</li> </ul>
<b>Performing:</b> <ul style="list-style-type: none"> <li>• Embody, Execute</li> <li>• Express</li> <li>• Present</li> </ul>	<b>Performing:</b> <ul style="list-style-type: none"> <li>• Rehearse, Evaluate, Refine</li> <li>• Select, Analyze, Interpret</li> <li>• Present</li> </ul>	<b>Performing:</b> <ul style="list-style-type: none"> <li>• Establish, Analyze</li> <li>• Choose, Rehearse</li> <li>• Share</li> </ul>	<b>Performing:</b> <ul style="list-style-type: none"> <li>• Select</li> <li>• Analyze</li> <li>• Share</li> </ul>	<b>Performing:</b> <ul style="list-style-type: none"> <li>• Integrate</li> <li>• Practice</li> <li>• Present</li> </ul>
<b>Responding:</b> <ul style="list-style-type: none"> <li>• Analyze</li> <li>• Critique</li> <li>• Interpret</li> </ul>	<b>Responding:</b> <ul style="list-style-type: none"> <li>• Select, Analyze</li> <li>• Evaluate</li> <li>• Interpret</li> </ul>	<b>Responding:</b> <ul style="list-style-type: none"> <li>• Examine, Discern</li> <li>• Critique</li> <li>• Interpret</li> </ul>	<b>Responding:</b> <ul style="list-style-type: none"> <li>• Perceive</li> <li>• Analyze</li> <li>• Interpret</li> </ul>	<b>Responding:</b> <ul style="list-style-type: none"> <li>• Perceive</li> <li>• Evaluate</li> <li>• Interpret</li> </ul>
<b>Connecting:</b> <ul style="list-style-type: none"> <li>• Synthesize</li> <li>• Relate</li> </ul>	<b>Connecting:</b> <ul style="list-style-type: none"> <li>• Interconnect</li> </ul>	<b>Connecting:</b> <ul style="list-style-type: none"> <li>• Incorporate</li> <li>• Affect, Expand</li> </ul>	<b>Connecting:</b> <ul style="list-style-type: none"> <li>• Synthesize</li> <li>• Relate</li> </ul>	<b>Connecting:</b> <ul style="list-style-type: none"> <li>• Synthesize</li> <li>• Relate</li> </ul>

- 1.2.5.Cr1a: Generate ideas for media artwork, using a variety of tools, methods and/or materials.
- 1.2.5.Cr1b: Develop individual and collaborative artistic goals for media artwork using a variety of methods.
- 1.2.5.Cr1c: Connect media artwork to personal experiences and the work of others.
- 1.2.5.Cr1d: Collaboratively form ideas, plans, and models to prepare for media artwork.
- 1.2.5.Cr1e: Model ideas and plans in an effective direction.
- 1.2.5.Cr1f: Brainstorm goals and plans for a media art audience.
- 1.2.5.Cr3c: Explore how elements and components can be altered for clear communication and intentional effects, point of view, perspective, and refine media artworks to improve clarity and purpose.

## **Strands and Cumulative Progress Indicators**

### **A. Career Awareness and Planning**

1. Describe various life roles and work-related activities in the home, community, and school.
2. Identify abilities and skills associated with various careers.
3. Identify reasons people work and how work habits impact the quality of one's work.

### **B. Employability Skills**

1. Describe and demonstrate the importance of personal and interpersonal skills.
2. Identify positive work habits and attitudes necessary for home, community, and school.
3. Identify reasons for working as part of a team.

### **A. Critical Thinking**

1. Recognize and define a problem.
2. Plan and follow steps to make choices and decisions.
3. Identify and access print and non-print resources that can be used to help solve problems.
4. Demonstrate brainstorming skills.

### **B. Self-Management**

1. Demonstrate an understanding of the relationship between personal behavior and self-image.
2. Recognize and build upon personal strengths.
3. Accept criticism and respond constructively.
4. Recognize personal likes and dislikes.
5. Demonstrate steps to deal with stress and conflict.

### **C. Interpersonal Communication**

1. Develop positive social skills to interact with others.
2. Select and use language appropriate to the situation.
3. Develop skills for accepting self and others through awareness of different cultures, lifestyles, and attitudes.
4. Practice steps for effective conflict resolution.
5. Work cooperatively with others to accomplish a task.

### **D. Character Development and Ethics**

1. Demonstrate character traits that are important in day-to-day activities in the home, school, and community such as trust, responsibility, respect, fairness, caring, and citizenship.
2. Conduct a cooperative activity or project that addresses a character trait.
3. Identify ethical behaviors in the home, school, and community.
4. Explain a person's responsibility to obey the laws and rules.

## **3. Proficiency Levels**

Grade three students identified as "Gifted and Talented."

#### 4. **Methods of Assessment**

- Participation
- Completed products and performance
- Teacher observation
- Rubrics (student-made, teacher-made, published)
- Sample collections/portfolios

#### 5. **Grouping**

Small group pull out for students identified as “Gifted and Talented” according to the Rutherford School District Gifted and Talented Policy (INSTRUCTION 6171.2 Adopted July 18, 2016)

#### 6. **Articulation/Scope & Sequence**

Mid-September to Mid-May (2 periods per week)

#### 7. **Resources**

##### a. **References**

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Wyatt, S., et al. *Kindergarten Primary Education Thinking Skills (P.E.T.S.)*. Pieces of Learning. Marion, IL, 2007

b. Technology

- calculators
- Chromebook
- Internet
- document camera

c. Supplies/Materials may include but are not limited to:

- tangrams and templates
- tessellation pieces/templates
- marble roller coaster
- a variety of art project supplies/paper
- balsa wood in a variety of sizes
- props for dramatizing
- recyclable items for inventing
- related videos
- legos

d. Supplemental Reading

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## 8. Methodologies

A multifaceted approach is used to disseminate the curriculum. Methods include but are not limited to:

- Differentiation
- Independent study
- Small group instruction
- Cooperative learning
- Shared Inquiry
- Problem-based learning

## 9. Suggested Activities (include but are not limited to:)

- a variety of mental puzzles, i.e., Rubik's Cube
- tangram activities
- polyhedron constructing
- tessellation designing
- improvisations, i.e., charades
- dramatizations
- creative writing
- mystery solving
- creative problem solving
- interpretive drawings
- creative art/craft projects
- divergent thinking of usual items
- invention activities
- science-based experiments/investigations
- thematic studies in areas of student interest
- field trips related to topics of study

## 10. Interdisciplinary Connections

The Discovery Curriculum areas of divergent thinking, convergent thinking, visual/spatial perception, interpretive thinking, and problem solving are integrated with language arts, math, and the content areas.

## 11. Differentiating Instruction for Students with Special Needs: Students with Disabilities, English Language Learners, Students with 504 plans, and Gifted & Talented Students

Differentiating instruction is a flexible process that includes the planning and design of instruction, how that instruction is delivered, and how student progress is measured. Teachers recognize that students can learn in multiple ways as they celebrate students' prior knowledge. By providing appropriately challenging learning, teachers can maximize success for all students.

## Examples of Strategies and Practices that Support

### Students with Disabilities

- Use of visual and multi-sensory formats
- Use of assisted technology
- Use of prompts
- Modification of content and student products
- Testing accommodations
- Authentic assessments

### Gifted & Talented Students

- Adjusting the pace of lessons
- Curriculum compacting
- Inquiry-based instruction
- Independent study
- Higher-order thinking skills
- Interest-based content
- Student-driven
- Real-world problems and scenarios

### English Language Learners

- Pre-teaching of vocabulary and concepts
- Visual learning, including graphic organizers
- Use of cognates to increase comprehension
- Teacher modeling
- Pairing students with beginning English language skills with students who have more advanced English language skills
- Scaffolding
  - word walls
  - sentence frames
  - think-pair-share
  - cooperative learning groups
  - teacher think-alouds

## **12. Professional Development**

As per the PDP/100 hours statement: the teacher will continue to improve expertise through participation in professional development opportunities. Specialized professional development is offered for teachers of Enrichment and Gifted and Talented through the following organizations: Bergen County Consortium of Teachers of the Gifted (BCCTG) and New Jersey Association for Gifted Children (NJAGC)

## **13. Curriculum Map (attached)**

## XI. Grade 3 - Curriculum Map/Pacing Guide

Unit Topic	Time Allocated	Differentiating Instruction for Students with Disabilities, Students at Risk, English Language Learners, Students with 504 plans & Gifted & Talented Students	Standards	Assessments
<b>Introduction to the Discovery program:</b> self-discovery and self-reflection	3 weeks	For <i>Enhancement</i> : <ul style="list-style-type: none"> <li>enhanced expectations</li> <li>scale project to more challenging outcomes</li> </ul>	NJSLs: W.3, RF.3, RL.3, SL.3 CRLLKS: 9.4.5.TL.3, 9.4.5.IML.2	<i>Formative Assessment:</i> Explore commonalities with peers through sharing  <i>Summative Assessment:</i> Presentation of final projects of autobiographical piece
<b>Problem Solving</b> Introduce creative problem solving process, model and practice, utilize activities that enhance visual/spatial perception	6 weeks	For <i>Enhancement</i> : <ul style="list-style-type: none"> <li>flexible grouping</li> <li>topic selection by interest</li> </ul>	NJSLs: 4.3, 1.4  CRLLKS:9.4.5G CA:1, 9.3.5.CI.3, 9.4.5.CT.4, 9.4.5.CT.1	<i>Formative Assessment:</i> Checklist of things to discuss (students to class)  <i>Summative Assessment:</i> Rubric to score final discussion of artwork chosen from Picturing America series- analyze and interpret piece

<p><b>SCULPTURE UNIT</b> Focus on creative and interpretive thinking skills</p>	<p>8 weeks</p>	<p><i>For Enhancement:</i> Supply a variety of materials for sculpture to be 3D model</p>	<p>NJSLS: G.2.1 9.4.5.CI.3, 9.4.5.CI.4,1.2.5.C r1a, 1.2.5.Cr1B,1.2.5. Cr1C, 1.2.5.Cr1D, 1.2.5.Cr1E, 1.2.5.Cr1F</p>	<p><i>Formative Assessment:</i> Sketch of design for sculpture</p> <p><i>Summative Assessment:</i> Completed model with descriptions of process</p>
<p><b>ARTIST RESEARCH</b> Focus on research skills and analytical thinking</p>	<p>6 weeks</p>	<p><i>For Enhancement:</i> Compare and contrast same artist with variety of their work; venn diagram of findings</p>	<p>NJSLS: M.2.2.A, 3.3 9.4.5.CI.4, 9.4.5.TL.3,3-LS3 -1,3-LS3-2</p>	<p><i>Formative Assessment:</i> Checklist of rubric, weekly check ins</p> <p><i>Summative Assessment:</i> Final project for artist that was researched, share work and media samples with class</p>
<p><b>LEGO/CODING PROJECT</b> brainstorm to generate ideas for inventions, research inventions, begin inventive process</p>	<p>6 weeks</p>	<p><i>For Enhancement</i></p> <ul style="list-style-type: none"> <li>•enhanced expectations</li> <li>•scale project to more challenging outcomes</li> </ul>	<p>NJSLS: 4.4, 4.5, 5.1, 5.3, 8.1.2.A.2, 8.1.2.B.1 9.4.5.CI.3, 9.4.5.CI.4, 9.4.5. CT.1 3-5ETS1-1, 3-5ETS1-2,</p>	<p><i>Formative Assessment:</i> Explore common products with peer sharing</p> <p><i>Summative Assessment:</i> Presentation of final product that was invented and researched; model and slide show to accompany (rubric)</p>

<p><b>LEGO CONT'D</b> Further develop invention, evaluate concept, refine, and create</p>	<p>3 weeks</p>	<p><i>For Enhancement:</i></p> <ul style="list-style-type: none"> <li>flexible grouping</li> <li>topic selection by interest</li> </ul>	<p>NJSLS: 4.4, 4.5, 5.1, 5.3, 8.1.2.A.2, 8.1.2.B.1 9.4.5.CI.3, 9.4.5.CI.4, 9.4.5. CT.1</p>	<p><i>Formative Assessment:</i> Discussion of model</p> <p><i>Summative Assessment:</i> Share final lego project with own model design and code to get model to move</p>
<p><b>GENEALOGY</b> Explore a variety of media/art in various countries</p>	<p>8 weeks</p>	<p><i>For Enhancement:</i> Sewing all parts of felt square Using digital media choice to tell family story Creativity welcomed for design and support</p>	<p>NJSLS: G.2.1, 6.1 9.4.5.CI.3, 9.4.5.CI.4, 9.4.5. CT.1</p>	<p><i>Formative Assessment:</i> Sharing information about family history</p>
<p><b>Genealogy Cont'd</b> Develop a sense of time, and culture</p>	<p>3 weeks</p>	<p><i>For Enhancement:</i> Compare show and tell items to other cultures presented in class</p>	<p>NJSLS: M.2.2.A 9.4.5.CT.4</p>	<p><i>Summative Assessment:</i> Presentation board Sewed felt square Scoresheet on rubric</p>