

PREKINDERGARTEN

SPLASH: UNIT 9

CONCEPTS AND ENDURING UNDERSTANDINGS:

Unit: Splash

Time Frame: Four Weeks

Key Concepts: Unique characteristics of water, experimentation, water conservation.

Concept Overview: *Water, found all around us in oceans, faucets, fountains, ice cubes and raindrops, is one of the most useful substances on earth.*

ENDURING UNDERSTANDINGS:

- Water is a clear, colorless, tasteless, and odorless liquid.
- Water adds weight to objects.
- Things mix with water in different ways.
- Some things soak up water and are changed by it; other things are waterproof.
- Water can freeze and become a solid.
- Water can evaporate.
- Some things float in water, others sink.
- Water is formed from droplets. Each droplet has a thin covering on top which holds its shape.
- Mixing water and soap makes bubbles.
- Water has many uses.
- The earth has a limited supply of water and people need to take care of it.

ESSENTIAL QUESTION:

1. How do people, animals and plants use water?

GUIDING QUESTIONS:

1. What are the properties of water? (tasteless, colorless, odorless, shapeless, gas, solid, liquid, absorption, evaporation sink/float. etc.)
2. What happens when water is mixed with other substances?
3. What is a water droplet?
4. What makes a bubble?
5. How is water used?

Lesson Sequence

1. Children will experiment to find out that water is a liquid, and it has certain characteristics. (tasteless/colorless/odorless)
2. Children will discover that water has unique characteristics that distinguish it from other substances. (Compare water to milk, peanut butter, sprite, orange juice etc.)
3. Children will investigate to find out that some substances dissolve or break apart in water while others retain their original form. (Coffee, sugar, Kool-Aid, flour, oil, pepper, sand, pebbles, food coloring)
4. Children will experiment to find out what happens to water when it gets hot or very cold.(solid/liquid)
5. Children will observe and explain how water can disappear on surfaces due to a process called evaporation.
6. Children will experiment to discover that some things absorb water and some things repel water (waterproof).
7. Children will experiment to discover that water has weight and compare weight of wet and dry objects. (Use same objects 1 wet/1 dry.)
8. Children will experiment to observe the shape, movement, and size of water droplets.
9. Children will make and experiment with bubbles.
10. Children will observe and describe how some objects float in water and others sink.
11. Children will tell that water has many uses for people and animals.
12. Children will define pollution and illustrate how we can keep the water clean.
13. Children will tell and illustrate how we can conserve water.

Reading English Language Arts

https://www.marylandpublicschools.org/programs/Documents/ELA/Standards/Grades_PK_K_MCCR_ELA%20Standards.pdf

<p style="text-align: center;">Splash</p> <p style="text-align: center;">4 Weeks</p>	<p style="text-align: center;">Read Aloud/ Book and Print Daily</p> <p style="text-align: center;">Essential Question: How can we be star readers? Why do we read? What makes a great story? How do words and pictures help tell a story?</p>	<p style="text-align: center;">Phonological Awareness Daily (Heggerty)</p>	<p style="text-align: center;">Alphabetic Awareness</p>	<p style="text-align: center;">Writing 2 Days</p> <p style="text-align: center;">Essential Questions: How can we represent thoughts and ideas? How can we be rising writers? Why are we writing and for whom? How do writers get their ideas?</p>	<p style="text-align: center;">Word Work/ Phonemic Awareness Day 5</p> <p style="text-align: center;">Essential Question: Why is it important to identify the differences in sounds? How are words made to convey meaning?</p>
<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Using “pretend text,” add two lines of text to the page by starting under the previous line on the inside, going to the right edge of the page and back to the inside on the next line (“return sweep”) • Create and track “pretend text” and draw an illustration to make a page in a story book. • Track text in books, from left to right, top to bottom, and page by page from front of book to end of book. • Make predictions using prior knowledge and experiences, title, front cover, illustrations/pictures, and text/print/words. • Identify name in print and letters in it. • Stories are real or imaginary. <p>What elements in the story could really happen? What elements are imaginary? Some stories give facts.</p> <ul style="list-style-type: none"> • Answer and ask questions about text. 	<p>Heggerty Weeks 33-35</p>	<p>Identify, construct and tell the sound of ... based on your classes needs.</p>	<p>Independent Writing (Teacher delivers a 7–10-minute mini lesson to model writing processes and habits. Students independently apply new skills. Teacher conferences and collects data during independent writing time)</p> <ul style="list-style-type: none"> • Use a combination of drawing, dictating, or developmentally appropriate writing to state information on a topic and supply facts about the topic • With modeling, guidance, and support review drawing, dictation, or developmentally appropriate writing • Participates in shared research and shared writing projects • Produce complete sentences in shared 	<ul style="list-style-type: none"> • Build and construct snap words based on your classes needs. <p>Orally segment individual phonemes in 2-3 phoneme words (e.g. cat=/c/-/a/-/t/)</p>

	<ul style="list-style-type: none"> • Participate in group reading activities. • Gain exposure to common types of literary text. • Recall one or more details in a story. • Connect text to life experiences. • Define and compare characters and events. • Define story events: <p>A story tells what happens. What happens in the story? What happens in the story? What happened after___? And then what happened?</p> <ul style="list-style-type: none"> • Retells stories and poems in a logical order. • Give the main idea and details of story. • Some stories give facts. <p>What is the topic?</p> <ul style="list-style-type: none"> • Uses books to conduct research. <p>Make connections to text and stories.</p>			<p>language activities</p> <ul style="list-style-type: none"> • Print upper and lowercase letters in first name (Name begins with a capital letter) • Demonstrate awareness and function of end punctuation • Understands words are separated by spaces in print • Add drawings or visual displays to descriptions as desired to provide additional detail 	
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Mathematics <https://www.ixl.com/standards/maryland/math/pre-k>

<p align="center">Counting and Cardinality</p> <p align="center">Essential Question:</p> <ul style="list-style-type: none"> • What is counting and how is it used? 	<p align="center">Operations and Algebraic Thinking</p> <p align="center">Essential Questions:</p> <p>How can we represent quantities in different ways?</p>	<p align="center">Measurement and Data</p> <p align="center">Essential Questions:</p> <ul style="list-style-type: none"> • How can we compare groups of objects? <p>Why and how can we sort objects?</p>	<p align="center">Geometry</p> <p align="center">Essential Questions:</p> <ul style="list-style-type: none"> • How can we create different shapes using different materials? • What whole can be made from these parts and what parts make this whole? <p>Is there a pattern?</p>
<p>For quantities of 0-10 demonstrates understanding of the following:</p> <ul style="list-style-type: none"> • Rote count to 20 (PK.CC.A.1) • Numerical order before/after (PK.CC.A.2) • Number recognition (PK.CC.A.2 PK.CC.A.3) • Match numbers and quantities (PK.CC.A.4 PK.CC.B.4) • 1:1 correspondence (PK.CC.B.4 PK.CC.B.4a) • Identify and count collections (PK.CC.B.4 PK.CC.B.4a PK.CC.B.4b PK.CC.B.4c) • Counting order (PK.CC.A.2 PK.CC.A.4) • Use a 10-frame to show and count quantities (PK.CC.B.4b, PK.CC.B5) • Construct collections (PK.CC.B.4 PK.CC.B.4a 	<ul style="list-style-type: none"> • Represent simple addition and subtraction problems with objects, fingers, mental images, drawings, sounds acting out situations, or verbal explanations up to 5 (PK.OA.A.1) • For any quantity 1-5, use objects or drawings to find the quantity that must be added to make 5 (PK.OA.A.3) <p>Decompose a quantity, less than or equal to 5, then to 10 into pairs in more than one way by using objects or drawings (PK.OA.A.2)</p>	<ul style="list-style-type: none"> • Describe and compare items by size, height, length, and weight (PK.MD.A.1) • Order 3 objects by a measurable attribute (PK.MD.A.2) • Compare groups of objects to determine same/more (PK.MD.B.4) • Describe and compare volume: empty/full (PK.MD.A.1) • Estimate how many small containers fill a larger one 	<ul style="list-style-type: none"> • Match, sort, and identify 3-dimensional shapes: cylinder (PK.G.B.3) • Use real world examples to describe cylinder (PK.G.B.4) • Construct and describe structures using 3-D shapes (PK.G.B.5)

<p>PK.CC.B.4b PK.CC.B.4c PK.CC.B.5)</p> <ul style="list-style-type: none">• Recognize quantity/subitizing (PK.CC.A.4)• Compare collections to tell if same, greater than or less than (PK.CC.C.6)• Counting on from a specified number (PK.CC.A.1 PK.CC.A.2 PK.CC.A.4) <p>Write numbers</p>			
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STANDARDS AND INDICATORS

Reading English Language Arts

[https://www.marylandpublicschools.org/programs/Documents/ELA/Standards/Grades PK K MCCR ELA%20Standards.pdf](https://www.marylandpublicschools.org/programs/Documents/ELA/Standards/Grades%20PK%20K%20MCCR%20ELA%20Standards.pdf)

Reading: Literature

- RL.PK.1.** With modeling and prompting, answer questions about details in a text.
- RL.PK.2.** With modeling and support, retell familiar stories/poems.
- RL.PK.3.** With modeling and support, identify characters, settings and major events in a story.
- RL.PK.4.** With modeling and support, answer questions about unknown words in stories and poems.
- RL.PK.5.** Gain exposure to common types of literary texts (e.g., storybooks, poems).
- RL.PK.6.** With modeling and support, identify the role of author and illustrator.
- RL.PK.7.** With modeling and support, tell how the illustrations support the story.
- RL.PK.9.** With modeling and support, compare adventures and experiences of characters in familiar stories.
- RL.PK.10.** Actively engages in group reading activities with purpose and understanding.

Reading: Informational Text

- RI.PK.1.** With modeling and support, answer questions about details in an informational text.
- RI.PK.2.** With modeling and support, recall one or more detail(s) related to the main topic from an informational text.
- RI.PK.3.** With modeling and support, connect individuals, events, and pieces of information in text to life experiences.
- RI.PK.4.** With modeling and support, answer questions about unknown words in a text.
- RI.PK.5.** With modeling and support identify the front cover, and back cover of a book.
- RI.PK.6.** With modeling and support define the role of the author and illustrator/photographer in presenting the ideas or information in a text.
- RI.PK.7.** With modeling and support, tell how the illustrations/photographs support the text.
- RI.PK.8.** With modeling and support identify the reasons an author gives to support points in a text.
- RI.PK.9.** With prompting and support, discuss similarities and differences between two texts on the same topic (i.e. in illustrations or descriptions).
- RI.PK.10.** Actively engage in group reading activities with purpose and understanding.

Reading: Foundational Skills

- RF.PK.1.** Demonstrate understanding of basic features of print.
- RF.PK.2.** Demonstrate understanding of spoken words and sounds (phonemes).
- RF.PK.3.** Know and apply grade-level phonics and word analysis skills in decoding words.
- RF.PK.4.** Engage with a variety of texts (e.g., a variety of structures and/or genres) with purpose and understanding.

Writing

- W.PK.1.** With modeling and support, use a combination of drawing, dictating, and developmentally appropriate writing to share opinion about an experience or book.

W.PK.2. Use a combination of drawing, dictating, or developmentally appropriate writing to state information on a topic.

W.PK.3. With modeling and support, use a combination of drawing, dictating, or developmentally appropriate writing to communicate a personal story about a single event and tell about the event in a meaningful sequence.

W.PK.5. With modeling, guidance, and support from adults, review drawing, dictation or developmentally appropriate writing.

W.PK.6. With prompting and support from adults, explore a variety of digital tools to express ideas.

W.PK.7. Participate in shared research and shared writing projects.

W.PK.8. With modeling and support from adult, recall information from experiences or information from provided sources to answer a question.

Speaking and Listening

SL.PK.1. Participate in collaborative conversations with diverse partners about pre-kindergarten topics and texts with peers and adults in small and larger groups.

SL.PK.2. Confirm understanding of text read aloud or information presented orally or through other media by asking and answering questions about key details with modeling and support.

SL.PK.3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

SL.PK.4. Describe familiar people, places, things, and events with modeling and support.

SL.PK.5. Add drawings or visual displays to descriptions as desired to provide additional detail.

SL.PK.6. With modeling and support, speak audibly and express thoughts, feelings, and ideas clearly.

Language

L.PK.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

L.PK.2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

L.PK.4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.

L.PK.5. With modeling and support from adults, explore word relationships and nuances in word meanings.

L.PK.6. Use words and phrases acquired through conversation, being read to, and responding to text.

Mathematics <https://www.ixl.com/standards/maryland/math/pre-k>

Counting and Cardinality

PK.CC.1. Count verbally to 10 by ones.

PK.CC.2. Recognize the concept of just after or just before a given number in the counting sequence up to 10.

PK.CC.3. Identify written numerals 0-10.

PK.CC.4. Understand the relationship between numbers and quantities to 5, then to 10; connect counting to cardinality.

PK.CC.5. Represent a number (0-5, then to 10) by producing a set of objects with concrete materials, pictures, and/or numerals (with 0 representing a count of no objects).

PK.CC.6. Recognize the number of objects in a set without counting (Subitizing). (Use 1-5 objects)

PK.CC.7. Explore relationships by comparing groups of objects up to 5 and then 10. 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 (includes groups with up to 5 objects).

Mathematics: Operations and Algebraic Thinking

PK.OA.1. Explore addition and subtraction with objects, fingers, mental images, drawings 1, sounds (e.g., claps), acting out situations, or verbal explanations (up to 5).

PK.OA.2. Decompose quantity (less than or equal to 5) into pairs in more than one way (e.g., by using objects or drawings).

PK.OA.3. For any given quantity from 0 to 5, use objects or drawings to find the quantity that must be added to make 5.

Mathematics: Number and Operation in Based Ten

PK.NBT.1. Investigate the relationship between ten ones and ten.

Mathematics: Measurement and Data

PK.MD.1. Describe measurable attributes of objects, such as length or weight.

PK.MD.2. Directly compare two objects with a measurable attribute in common, using words such as longer/shorter; heavier/lighter; or taller/shorter.

PK.MD.3. Sort objects into self-selected and given categories.

PK.MD.4. Compare categories using words such as more or same.

Mathematics: Geometry

PK.G.1. Match like (congruent and similar) shapes.

PK.G.2. Group the shapes by attributes.

PK.G.3. Match and sort three-dimensional shapes.

PK.G.4. Describe three-dimensional objects using attributes.

PK.G.5. Compose and describe structures using three-dimensional shapes. Descriptions may include shape attributes, relative position, etc.

Fine Arts

https://www.marylandpublicschools.org/programs/Documents/ELA/Standards/Grades_PK_K_MCCR_ELA%20Standards.pdf

Visual Arts

1.0 Perceiving and Responding: Aesthetic Education

Students will demonstrate the ability to perceive, interpret, and respond to ideas, experiences, and the environment through visual art.

3.0 Creative Expression and Production

Students will demonstrate the ability to organize knowledge and ideas for expression in the production of art.

4.0 Aesthetics and Criticism

Students will demonstrate the ability to make aesthetic judgments.

Science

https://earlychildhood.marylandpublicschools.org/system/files/filedepot/4/msde-pedagogy-report-appendix_2016.pdf

1.0 Skills and Processes

Students will demonstrate the thinking and acting inherent in the practice of science.

Science:

2.0 Earth/Space Science

Students will use scientific skills and processes to explain the chemical and physical interactions (i.e., natural forces and cycles, transfer of energy) of the environment, Earth, and the universe that occur over time.

3.0 Life Science

The students will use scientific skills and processes to explain the dynamic nature of living things, their interactions, and the results from the interactions that occur over time.

4.0 Chemistry

Students will use scientific skills and processes to explain the composition, structure, and interactions of matter in order to support the predictability of structure and energy transformations.

Social Studies

https://mgaleg.maryland.gov/cmte_testimony/2021/wam/1dgxxW3s6ALH8aZOW2oPG11b9CDVppQ_.pdf

3.0 Geography

Students will use geographic concepts and processes to understand location and its relationship to human activities.

6.0 Social Studies Skills and Processes

Students shall use reading, writing, and thinking processes and skills to gain knowledge and understanding of political, historical, and current events using chronological and spatial thinking, economic reasoning, and historical interpretation, by framing and evaluating questions from primary and secondary sources.

FAMILY COMMUNICATION
Splash
Thematic Unit Parent Letter



Dear Parents/Guardians,

We are beginning a new theme called *Splash*. This unit will help your child learn about the physical properties of water and that water is one of the most useful substances on earth. Mixing different things with water will lead your child to surprising discoveries. What is a bubble? What objects float in water? How is water used by people, plants, and animals? Your child will find the answers to all these questions as (s)he investigates water and ice.

During *Splash* your child will experiment with water wheels and watch water flow through funnels and tubes, construct a water works, and investigate to see what objects make good bubble wands. (S)he will listen to Handel's water music and paint a water scene.

Listed below are the key learning goals for your child during *Splash*.

- Experiments and uses a data sheet to record findings
- Counts to 20 in sequential order
- Identifies, sequences, and makes sets 0-10
- Orders 3-4 objects on the basis of weight, width, and capacity
- Tracks text top to bottom and left to right to imitate reading.
- Recognizes, names and constructs all upper-case and lower-case letters.
- Reads all sight words.
- Draws pictures and writing text to make pages in a book
- Uses a combination of drawing, dictating, or developmentally appropriate writing.
- Puts words together that are separated by initial letter/rest of word (c-at, b-ag); by syllables (ba-by) and by sounds (c-u-p)

During *Splash* your child will be learning about the properties of water by interacting in many "hands-on" experiments. You may want to ask your child which objects and materials absorb water, what does the word evaporate mean, and how can water change from a liquid to a solid. As you and your child continue to read at home, select some nonfiction books that will inform him/her about the importance of water to all living things. Do you know if a rubber band can float or does it sink? In the story *Who Sank the Boat?* by Pamela Allen that your child heard during literature, ask him/her what animal really sank the boat. If you ask your child about patterns, he can create original patterns and find patterns in the environment. Water, water everywhere is important to people, animals, and plants. We will be celebrating the necessity, use, and conversation of water during this theme.