

Topic of Study – Water in Our World

Introduction to Topic

Water and children are a natural. For children in Arkansas there are endless possibilities available to them as they embark on a study of water. They all experience the use of water in their daily lives. Many children are familiar with bodies of water, whether it is a lake, pond, river, creek, stream, bayou, swimming pool, or the annual family vacation to the Gulf coast. Water sports and recreation are a vital part of the lives of many Arkansas families. Best of all, water is a free and readily available resource for learning.

Teacher Notes about STEM

- *Early Childhood Educators are now linking together science, technology, engineering, and math into what is called STEM curriculum.*
- *This topic of study, Water in Our World, focuses on the science component of STEM.*

Teacher Notes

Arkansas Minimum Licensing Requirements (Rev. 1.1.1) requires the following:

400 PROGRAM – 401 Program Requirements for all ages

5.1. The facility shall have an approved curriculum with weekly activity plans appropriate for the developmental needs of each group of children.

To assist your program in meeting this requirement, refer to Developing Weekly Activity Plans for Adventures in Learning for information on how to develop your plans. In addition, 2 different examples of blank activity plan sheets are included. Feel free to make copies of the plan sheet you select and use it each week. To help you in planning, there are also 2 samples of completed plan sheets that you may use as guides when developing weekly activity plans for your group of children.

- ***Adventures in Learning*** is an Arkansas approved curriculum.
- *This curriculum guide is a collection of activities that support the Big Ideas listed below. Choose those activities that best meet the needs of the children in your group.*
- *Consider extending this topic of study beyond a one-week period of time. There is so much for children to learn about water in their world. Carry over activities from one week to another because children enjoy and learn best through repetition.*
- *If you do not have some of the featured books, refer to the Additional Books section for other books you can use.*
- *It is important to read the same book several times to children so that they have a better understanding of the theme, plot, characters, and sequence of events. In each of the readings presented here, there is a different focus on what is happening in the story*

Big Ideas

Here are three big ideas about water that you can help children explore:

- Water has many uses in our daily life
- Water can be liquid, solid or steam
- Water sports and recreation are fun

Materials to Collect and Make

- Pictures that include uses for water, water sports and recreation, bodies of water
- Children's books about water:
Water by Frank Asch
Mr. Gumpy's Outing by John Burningham
Harry the Dirty Dog by Gene Zion, illustrated by Margaret Bloy Graham
- Felt or Magnetic Board
- Storytelling Figures
Storytelling figures (felt or magnetic) for the book, *Harry the Dirty Dog* (See Attachment: [Harry the Dirty Dog](#))
Storytelling figures (felt or magnetic) for the book, *Mr. Gumpy's Outing* (See Attachment: [Mr. Gumpy's Outing](#))
Storytelling figures (felt or magnetic) for the Mother Goose Rhyme, Jack and Jill (See Attachment: [Jack and Jill](#))
- Illustrated Jack and Jill Nursery Rhyme Chart
- Illustrated Little Turtle Poetry Chart
- Name cards for each child – On 4" x 6" or 5" x 8" index cards, print each child's name. Use upper case for first letter and lower case for other letters. (Example: **Joseph**) Laminate or cover the cards with clear self-adhesive paper for durability.
- Wave bottle – A large clear soap refill bottle works well. Fill the bottle to ½ full with water. Add blue food coloring. Add baby oil to fill the bottle. Seal bottle securely so children cannot open it.
- Glitter bottle – Fill a bottle half full with colored glitter. Add water to the top of the bottle. Seal bottle securely so children cannot open it.
- Tea Party Dramatic Play Prop Box: Collect an unbreakable teapot, cups, a lacy tablecloth (can be plastic), napkins, and two or three empty boxes that previously contained different kinds of tea bags or leaves. Label the box "Tea Party."
- Harry the Dirty Dog Prop Box: Collect a stuffed dog, a brush, a small dishpan and a towel. Label the box "Harry the Dirty Dog."

Teacher Note: *For the wave and glitter bottles, use clear and sturdy plastic bottles (Gatorade, whipping cream and single serve juice bottles work best. Water or soda/cold drink bottles are too flimsy for making sensory bottles.*

Resources

- Check with your local library for the availability of children's books
- Children's books can be purchased online, from school supply catalogs or local book stores

Introducing and Concluding the Topic

Introduction: Finding out what children know about “Water”

Learning Goals:

CD2.4 Holds and manipulates information in memory (*short-term and working memory and long-term memory*)

EL3.1 Responds to features of books and print (*print knowledge*)

To introduce the topic of study, “Water,” you need to know what children already know about the topic. This allows you to build on your children’s experiences. It also helps create an interest in the topic. Here’s how to begin.

- Gather the children together in a group. Say, “For the next few days we’re going to be learning about water.”
- Write on chart paper, chalk board or marker board the word “Water.”
- Invite children to tell you things they already know about water. You may have to ask questions to stimulate their thinking; questions such as “What are some things you like about water? What is your favorite thing to do with water?”
- Make a list of all of the things children know about water.
- Review the list with them and say, “You already know a lot of things about water and we’ll find out even more.”
- Now ask children what they would like to know about water and record their comments.
- Keep the two lists until you have completed the topic of study.

What We Know about Water	What We Would Like to Know about Water	Things We Learned about Water

Conclusion: Finding out what children have learned about water

- Gather the children in a group at the conclusion of the study about water.
- Write on chart paper, chalk board or marker board “Things We Learned about Water”.
- Invite children to tell you some things they have learned about water. You may have to ask prompt questions such as “What are some ways we use water at home and in the classroom?” “What are some ways we can have fun in water?” “What do we call water when it is frozen?”
- Make a list of all the things children learned about water.
- Read the first two lists you made with the children. Then say, “Here are some new things you found out about water” and read today’s list with them.

Teacher Note: *This method of introducing and concluding the topic is known as KWL. What do children know, what do they want to know, and what did they learn.*

Reading Books with Children

Learning Goals:

CD2.1 Focuses and sustains attention

CD2.4 Holds and manipulates information in memory (*short term and working memory, long term memory*)

LD1.1 Understands and responds to language (in child's home language) (*vocabulary and language comprehension*)

LD2.1 Uses increasingly complex vocabulary, grammar, and sentence structure (in child's home language) (*expressive vocabulary*)

EL1.1 Shows interest in literacy experiences (*engagement in literacy experiences*)

EL1.2 Engages in read-alouds and conversation about books and stories

EL3.1 Responds to features of books and print (*book knowledge*)

Book #1: *Water* by Frank Asch, author and illustrator

First Reading of *Water*

- Prepare to read the book, *Water*.
- Show the cover, give title, author and illustrator. Explain that the author is the person who writes the book and the illustrator is the person who draws the pictures.
- Ask the children to predict what they think the book is about.
- Read the story so all children can see the pictures in the book.
- Clarify and help children understand words with which they might not be familiar: dew and brook, for example.
- Show the front cover after reading the book and ask children to look at it very carefully. Discuss with children what they see on the cover: fish of all colors and sizes, a turtle, a big sail boat with a small sail boat behind it, for example.
- Explain that they are now going to look at the pictures in the book together to see if they can find a picture that is like the one on the cover.
- Turn each page and ask, "Is this page like the cover?" Continue until you come to the page like the one on the cover, except it is bigger. (It is the page that has "Water is what fish breathe.") The children should recognize it as being like the cover.
- Invite children to name what they see on the page, then show the cover and children can again name what they see there. Congratulate them for finding the page that is like the cover.

Second Reading of *Water*

- Have a small bottle partially filled with water and a small bowl with ice cubes nearby, but out of sight of children.
- Show cover and invite children to recall the title of the book. Give author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up by returning to the first page. Read “Water is rain.” Invite children to recall with you some of the things they remember about rain. Then read the page, “Water is ice and snow” and invite children to recall some of the things they remember about snow and ice.
- Show and let the children examine the bottle of water and the bowl of ice. Ask them how ice and water are different. Help them use the word “solid” for ice and “liquid” for water. They may notice that the ice is melting and becoming water, or “liquid.”
- Ask the children what they think will happen if the ice cubes are put on the science/discovery table and what will happen if the bottle of water is put in the freezer.
- Write their predictions on a chart sheet or a chalk or marker board. For example, they may say, “The ice will melt.” and “The water will freeze.” **Remember to write exactly what the children say.** This is one of the ways children learn about science; by predicting what will happen and following up to see if their predictions were correct.
- Tell the children that you will leave the ice cubes on the science/discovery table and put the bottle of water in the freezer. Suggest that they watch the ice cubes to see what happens and state that you will bring the bottle of water from the freezer out later for children to examine.
- Follow up with the children by asking them if their predictions were correct and guide them to discuss what happened to the ice cubes (they melted and became liquid) and to the bottle of water (it froze and became solid).

Additional Learning Goals:

CD1.1 Shows curiosity and a willingness to try new things (*exploration and investigation*)

CD3.1 Uses reasoning and planning ahead to solve problems and reach goals (*problem solving*)

ST1.1 Engages in the scientific process to collect, analyze, and communicate information

ST2.1 Demonstrates knowledge of core science ideas and concepts (*stability and change*)

Small Group Activity: “I Spy” with the book *Water*

- Gather a small group of children, 3 to 5, and seat them so they can all see the pages of the book, *Water*.
- Read the story so all children can see the pictures in the book.
- Invite the children to play “I Spy” with you.
- Turn to the double page spread near the end of the book. This page has no words, but has lots of scenes of water and its many uses. Make sure all the children can see the page.
- Say to the children, “I spy a man washing his car. Do you spy him, too?” “I spy a boy taking a bath with his hat on. Do you spy him, too?”
- Continue with this game until children have helped you spy all of the water scenes.

Book #2: *Mr. Gumpy's Outing* by John Burningham, author and illustrator

First Reading of *Mr. Gumpy's Outing*

- Prepare to read the book *Mr. Gumpy's Outing*.
- Show the cover, give the title and author. (Explain that the author is the person who writes the book and the illustrator is the person who draws the pictures.)
- Ask children if they know what an "outing" is. Explain that an outing is something you do like taking a walk in the woods or riding in a boat like Mr. Gumpy and his friends are doing.
- Read the story so all children can see the pictures in the book. Stop and explain words which may not be familiar to children. For example, explain that "squabble" is like quarreling or not getting along with each other. "Trample" is to walk on something with heavy feet.
- Review the book by asking questions such as, "Do you remember where Mr. Gumpy lives?" "After everyone falls in the water, where did Mr. Gumpy and his friends go?"
- Show the last page with everyone having tea. Ask the children to identify the animals at the table. Ask them what they think it would be like to have tea with these animals.

Second Reading of *Mr. Gumpy's Outing*

- Show the cover, give the title, author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up the second reading by inviting the children to help you read the book by saying some of the words.
- Begin to read, pausing before the end of a sentence. Encourage the children to complete the sentence. For example, show the first page and read, "This is _____ (Mr. Gumpy.)" "Mr. Gumpy owned a boat and his house was by a _____(river)"
- Involve the children in using the words in the book to describe the actions of the different characters; for example, the goat kicked, the calf trampled, the pig mucked about.

Book #3: *Harry the Dirty Dog* by Gene Zion, illustrated by Margaret Bloy Graham

First Reading of *Harry the Dirty Dog*

- Prepare to read the book, *Harry the Dirty Dog*.
- Determine if any of the children have dogs as pets. If so, do they wash them?
- Show the cover, give title, author and illustrator. (Explain that the author is the person who writes the book and the illustrator is the person who draws the pictures.)
- Ask the children to look at the two pictures on the cover and describe how the dogs are alike and different. (Alike: same size, standing the same way. Different: one is white with black spots and the other is black with white spots)
- Ask the children if they think that the same dog is in both pictures. Accept their answers and say, "Let's read and find out."
- Read the story so all children can see the pictures in the book.
- Show the cover again and ask children if Harry is in both pictures and why they say he is. (In one he's clean and in the other he's dirty.)
- Invite the children to recall how Harry kept from taking a bath. Show the picture of Harry burying the brush in the yard.
- Involve children in discussing how they feel about taking baths. Do they like baths? Why do they like or not like baths? How would they keep from taking a bath? What could they hide?

Second Reading of *Harry the Dirty Dog*

- Begin by asking the children if they have a dog and if they give it a bath. Allow brief discussion about children's experiences bathing their dogs.
- Show cover, give title, author and illustrator.
- Read the story so all children can see the pictures in the book.
- Follow up the second reading by showing the pages where Harry played and got dirty. Invite the children to retell the story by describing what is happening on each page that causes Harry to get dirty.
- Invite the children to discuss some of the things they do to get dirty and what their families say when they see them so dirty.

Third Reading of *Harry the Dirty Dog*

- Show cover. Ask children to recall the name of the book. Give author and illustrator. Read the story so all children can see the pictures in the book.
- Follow up the third reading by showing the page where Harry got back home.
- Ask the children if Harry looks the same as he did when he left home. How is he different?
- Review what the family said when they saw Harry and how he tried to show the family he really was Harry. Show the pictures
- Ask the children how they think Harry felt when the family didn't recognize him.
- Involve the children in discussing what happened to cause the family to recognize Harry. Show the pictures.
- Ask the children how they think Harry felt when the family finally recognized him.

Additional Learning Goal:

SE2.2 Interprets and responds to feelings of others (*emotion understanding*)

Additional Books

Who Sank the Boat? by Pamela Allen

Swimmy by Leo Lionni (also available in Spanish)

Commotion in the Ocean by Giles Andreae, illustrated by Guy Parker-Rees

Rainbow Fish by Marcus Pfister

Language and Literacy Materials and Activities

Learning Goals:

LD1.1 Understands and responds to language (in child's home language) (*vocabulary and language comprehension*)

LD2.1 Uses increasingly complex vocabulary, grammar, and sentence structure (in child's home language) (*expressive vocabulary*)

EL1.1 Shows interest in literacy experiences

EL2.1 Notices and manipulates the sounds of language (*rhyme*)

CA1.1 Explores through listening, singing, creating and moving to music

Six Little Ducks

See the Topic of Study "**Rain**" for the words and motions to this song

Teacher Note: *Children enjoy repeating favorite songs such as this one.*

Jack and Jill

Jack and Jill went up the hill
To fetch a pail of water.
Jack fell down
And broke his crown
And Jill came tumbling after.

- Make felt or magnetic figures for the rhyme, "Jack and Jill". (See Attachment: [Jack and Jill](#))
- Say this Mother Goose Rhyme with the children as you place the felt or magnetic figures on the storyboard. Ask children if they can think of another word for "pail." The children may come up with "bucket" for example. Ask the children what they think the word "crown" means. Explain that in this rhyme, crown means "head." They also may need to understand that "fetch" means to "get" a pail of water.
- Repeat the rhyme and invite children to join you in saying it. Repeat it on other days.
- Place the felt or magnetic figures and storyboard in the library/book area and allow children to use the figures. Observe them and listen to see if they say the rhyme.
- Make an illustrated chart for the rhyme "Jack and Jill."
- Show the chart and invite children to say the rhyme.
- Post the chart on the wall in the library area and observe to see if children look at the chart and say the rhyme.

Counting Rhyme

One, two, three, four, five, I caught a fish alive.	(Hold up 1, 2, 3, 4, 5 fingers on one hand)
Six, seven, eight, nine, ten I let it go again. Why did I let him go? Because he bit my finger so.	(Hold up fingers on other hand)

Little Turtle

There was a little turtle	(Make small circle with thumb and index finger)
He lived in a box.	(Cup hands to form box)
He swam in a puddle	(Swimming motions)
He climbed on the rocks.	(Climbing motion with hands)
He snapped at a mosquito,	(Snap with thumb and forefinger)
He snapped at a flea.	(Repeat)
He snapped at a minnow,	(Repeat)
He snapped at me.	(Turn hand toward self and snap)
He caught that mosquito,	(Catching motion with hands)
He caught that flea,	(Repeat)
He caught that minnow,	(Repeat)
But he didn't catch me.	(Point to self and shake head, "No!")

- Make an illustrated "Little Turtle" poetry chart.
- Show the chart to the children and invite them to say the poem with you.
- Post the chart on the wall in the library area and observe to see if children look at it and say the poem.

Five Little Speckled Frogs

Five little speckled frogs (Hold up five fingers)
Sitting on a speckled log
Eating some most delicious bugs.
Yum! Yum! (Pat stomach)
One jumped into the pool, (Jump one finger into pool)
Where it was nice and cool.
Now there are four little speckled frogs (Hold up four fingers)
Burr-ump!

Repeat counting down until there are no little speckled frogs.

Repeat the song using felt or magnetic figures of frogs and log.

Repeat the song allowing children to be frogs.

- Have five children at a time stoop down in a row and be speckled frogs. .
- Sing the song and as you sing "One jumped into the pool" lightly touch one child on the head to designate that he is to jump into the pool.
- Continue this until no children are left.
- Repeat the song until all children who want to participate have had a turn being frogs.

Teacher Note: *Designate how and where children are to jump so that the activity is easy for you to manage.*

Learning Goal:

EL1.1 Shows interest in literacy experiences (*engagement in literacy experiences*)

Storytelling Figures: *Mr. Gumpy's Outing* (See Attachment: [Mr. Gumpy's Outing](#))

- Make felt or magnetic story figures for the book, *Mr. Gumpy's Outing*
- Use the figures and a felt or magnetic board to tell the story to the children
- Tell the children that the story figures and board will be placed in the book area.
- Review with the children the correct way to use the story figures. For example:
 - ✓ Two children at a time use the figures to tell the story
 - ✓ Keep the figures on the board or in the storage container
- Spend time in the library/book area helping children use the story figures correctly.

Storytelling Figures: *Harry the Dirty Dog* (See Attachment: [Harry the Dirty Dog](#))

- Make felt or magnetic story figures for the book, *Harry the Dirty Dog*
- Follow the same procedures as listed for *Mr. Gumpy's Outing*

Learning Goals:

CD3.1 Uses reasoning and planning ahead to solve problems and reach goals (*problem solving*)

CD3.2 Engages in symbolic and abstract thinking (*abstract thinking*)

EL3.1 Responds to features of books and print (*print knowledge*)

Activity: We Use Water Every Day

- Gather chart paper and markers, or use marker or chalk board.
- Present this situation to the children: What if we had no water in our classroom?
- Allow several responses.
- Invite children to identify the different ways water is used in our classroom each day. Examples: wash hands, flush toilet, wash dishes, play in, mix paints, mop floor, drink
- Record their responses on chart paper.
- Invite children to help you read back what they have said.

Teacher Note: Consider repeating this activity, changing it by asking children to discuss the different ways water is used in their homes.

Science / Discovery and Math

Learning Goals:

CD1.1 Shows curiosity and a willingness to try new things

CD3.1 Uses reasoning and planning ahead to solve problems and reach goals (*problem solving*)

MT2.1 Uses classification and patterning skills (*classification*)

ST1.1 Engages in the scientific process to collect, analyze, and communicate information

ST2.1 Demonstrates knowledge of core science ideas and concepts (*structure and function*)

Activity: What Holds Water? (Small Group Activity – 3 to 4 children)



- Gather items such as measuring cups, slotted spoon, aquarium nets, small pitchers, sieve strainer, margarine tubs, soup ladle, funnels and detergent scoops.
- Prepare a water table or dishpan 1/3 full of water.
- Provide plastic aprons or old shirts for children to wear and sponges and/or towels for cleaning up water spills.
- Make a chart with two columns. Head one column “Will Hold Water” and the other, “Will Not Hold Water.”
- Show the children one item at a time, help them name the item, and ask them to predict which item will hold water and which will not. Record their predictions on the chart in the correct column.

<u>Will Hold Water</u>	<u>Will Not Hold Water</u>
measuring cup	aquarium net

- Place the items in the water table or tub.
- Allow children to experiment with the items, observing them as they play with them in the water. Listen to their comments.
- Ask a child to retrieve from the water table a specific item such as a measuring cup and read from the chart, “You predicted that the measuring cup would hold water. Was your prediction correct?”
- Repeat this process with each item in the “Will Hold Water” column.
- Focus on the “Will Not Hold Water” column next and repeat the process.
- Ask children to explain why some of the items did not hold water. (holes)

Activity: Sink or Float

- Gather objects such as a cork, small plastic scoop/cup, Ping-Pong ball, golf ball, toy car, clothespin, key and rock.
- Prepare a Sink or Float chart and laminate it or cover it with clear adhesive paper.

<u>Sink</u> 	<u>Float</u> 

- Prepare a water table or dishpan 1/3 full of water.
- Provide plastic aprons or shirts for children to wear, sponges, and towels for wiping up splashes and spills.
- Introduce the chart and assorted objects to the children. Hold up one item at a time and allow the children to predict if they think the object will sink or float by a thumbs up or thumbs down sign. Lay the items on the chart in the appropriate column.
- Allow the children time to examine and experiment with the objects to test their predictions and see if the items sink or float.
- Extend the activity by allowing children to pick up items with tongs or aquarium nets as they experiment in water play.

Teacher Note: *If the term “float” is new to the children, explain it as objects that stay “on top of the water” or do not “go to the bottom.” At this level no attempt should be made to deal with the complexities of why objects float or sink.*

Teacher Note: *When introducing this activity, assure all children that they will have an opportunity to play the “Sink or Float” game and plan so that all children have a turn.*

Activity: Making Goop (Small Group: 4 to 6 children)

- Gather cornstarch, water, bowl, spoon, food coloring (optional)
- Introduce the ingredients cornstarch and water to the children.
- Invite the children to feel the cornstarch and discuss how it feels.
- Allow the children to help measure equal parts of cornstarch and water and pour into a bowl.
- Allow the children to take turns stirring with a spoon, then mixing with their hands.
- Provide time for each child to manipulate the goop.
- Encourage the children to discuss how the goop feels, and what they can do with it.
- Extend the activity by making three batches of goop; one red, one yellow and one blue.
- Allow children to mix small amounts of yellow and blue goop with their hands and observe what they say as they make green. Continue the process using blue and red to make purple, and red and yellow to make orange

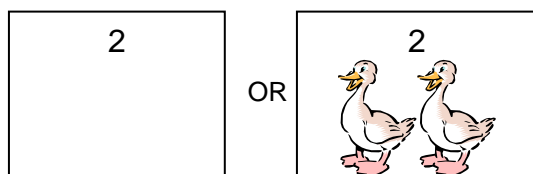
Learning Goal:

MT1.1 Demonstrates number sense and an understanding of quantity (*connection of number, numeral and quantity*)

Activity: Catching Six Little Ducks (Small Group Activity: 3-5 children)

- Create 6 cards with a numeral, from 1 to 6 on each card. Laminate or cover the cards with clear adhesive paper.
- Place six small rubber ducks and an aquarium net in the water table.
- Show a numeral card and invite a child to place the correct number of ducks on the card.
- Repeat this with the other children.
- Help children be successful with this activity

Teacher Note: Consider making two sets of numeral cards. On one set, write the numeral and draw a corresponding number of ducks on the card. Invite the children to place each duck on a drawing. This is for children who may be ready to demonstrate one-to-one correspondence, but do not yet understand number (how many) and numeral (3 is a numeral) relationship.



Movement / Physical Education

Learning Goals:

PH1.1 Demonstrates locomotor skills (*travelling, complex movement*)

PH1.2 Shows stability and balance

Activity: Crossing the Alligator River

- Create a log across the alligator river with a balance beam or strip of masking tape about 10' long.
- Have children sit on either side of the log.
- Explain to children they are going to pretend that the balance board or tape is a log on which they must walk in order to cross the alligator river.
- Invite the children, one at a time, to walk across the alligator river.

Teacher Note: Assist children who need help in walking on the balance board or tape. You may need to hold a child's hand until he or she is comfortable walking on the board without assistance. Suggest that children hold their arms straight out from their body as they walk.

Activity: Jumping the Creek

- Place two pieces of rope (5-6' lengths) parallel on the floor or ground. Explain to children that this is a creek.
- Invite children, one at a time, to jump over the ropes
- Increase the distance between the ropes as children become more skilled at jumping.

Teacher Note: Refer to the topic of study, "Rain," for information on jumping techniques.

Extend the activity by using carpet squares (placed on top of a carpeted surface to lessen the chance of the carpet sliding) to represent stepping stones that go from one side of the creek to the other. One at a time, children jump from one stone to another until they reach the other side.

Learning Goal:**PH1.2 Shows stability and balance** (*core stability*)**Activity: Row Your Boat****Row, Row, Row Your Boat**

Row, row, row your boat,
Gently down the stream.
Merrily, merrily, merrily, merrily,
Life is but a dream.

- Introduce the song, Row, Row, Row Your Boat, to the children and sing it with them a couple of times.
- Determine what children know about rowing. For example, ask the children, “If your boat doesn’t have a motor, or your motor quits, how will you get to shore?” Introduce paddles as what we row with. Have a real paddle or a picture of one to show children.
- Explain that rowing takes two people working together. Have the children sit on the floor in pairs with their feet together and holding hands. Invite them to rock back and forth, keeping in rhythm with the tune as you sing.
- Speed up the tempo, singing “Hurry down the stream.”

Learning Centers

Teacher Note: *As children are involved in the learning centers, they are engaging in activities that support all or most of the domains of child development and early learning:*

- *Social and Emotional Development*
- *Cognitive Development*
- *Physical Development and Health*
- *Language*
- *Emergent Literacy*
- *Mathematical Thinking*
- *Science and Technology*
- *Social Studies*
- *Creativity and Aesthetics*

However, there will also be activities included and these will have specific goals.

Art Center

- Provide black and white paint, brushes and large sheets of paper at the easel.
- Cut out black and white circles of different sizes and put them in a container. Show them to the children and explain that they will be available in the art center for them to use in their creations.

Learning Goals:**PH2.2 Adjusts grasp and coordinates movements to use tools** (*writing and drawing tools, scissors*)**CA2.1 Explores, manipulates, creates, and responds to a variety of art media** (*exploration of art, art concepts*)**Activity: Water Mural**

- Invite children to create a wall mural about water. Provide a long strip (6') of butcher paper, nature magazines, scissors and glue. Explain that they can look through the magazines, find pictures about water, and glue them to the paper. Children who are inexperienced in using scissors can be helped to tear them out or you may want to cut out a selection of pictures in advance.

Teacher Note: *Label the mural “Water.” Invite children to dictate a sentence about their pictures. Post the mural on the wall at child’s eye level. This activity may take place over several days so that each child has an opportunity to contribute. This is a “child choice” activity, not an activity where all of the children sit at the table and do this activity at the same time.*

Activity: Watercolor Paints

- Provide watercolor paints, fine paint brushes, paper and water in small cups. Introduce the paint to the children and demonstrate how to rinse brushes between colors. Allow children to experiment with the paints.

Teacher Note: *Add different types of paper for watercolor painting. For example: newsprint, coffee filters (shaped like fluted-edged baskets and flattened into circles), poster board or card stock. Call children's attention to the different rates of absorption that occurs.*

Activity: Crayon Wash

- Provide children with wax crayons, white paper and blue watercolor or tempera paint. Invite them to create a design or picture with the wax crayons. Encourage them to color solid areas, "pressing down really hard." Invite children to use a large brush to cover the entire surface of the paper with the blue paint.

Teacher Note: *The waxy crayons will repel or turn away the water, which settles in between the crayon designs. This looks like water.*

Teacher Note: *In the art ideas presented here keep in mind that your role is to provide the materials and make sure children know the proper way to use them. Allow the children to use the materials in their own creative way.*

Block Center

- Add toy boats to block center. Post pictures of bridges over water. Add blue paper or a blue towel for water.
- Make heavy cardboard paddles (18" in length) and place in block center. Introduce paddles to children and discuss their use and how to play safely with them.
- Place a life jacket in the block center.

Library/Book Corner

- Add books about water.
- Add pictures of water (lamine or cover pictures with self stick adhesive)
- Add felt or magnetic board and story figures of the stories, *Mr. Gumpy's Outing* and *Harry the Dirty Dog*, and the rhyme, Jack and Jill

Learning Goals:**SE1.2 Interacts with peers****CA3.1 Explores feelings, relationships, and concepts through imitation, pretend play, and sociodramatic play** (*exploration of drama*)**Home Living/Dramatic Play**

- Place a life jacket in the home living/dramatic play center after introducing it to children in either large or small group. Invite the children to share what they know about life jackets. Discuss with them the importance of wearing the jackets when they are on a boat or near water, for example.
- Add the Harry the Dirty Dog Prop Box to the home living area.
- Add the Tea Party Prop Box to the home living area. Keep the box in the area throughout the study of the topic or as long as the children enjoy it. It can always be added at another time.

Learning Goals:

CD1.1 Shows curiosity and a willingness to try new things (*exploration and investigation*)

ST1.1 Engages in the scientific process to collect, analyze, and communicate information

ST3.1 Demonstrates knowledge of the characteristics of living things, the earth's environment, and physical objects and materials (*physical objects and materials*)

Sand Table or Tub

- Place props such as gelatin molds, muffin tins, cookie cutters, and measuring cups in sand area.
- Introduce the props to children and ask them to predict what they think will happen if water is added to the sand.
- Allow the children to add water to the dry sand so that it is damp enough for children to make molds with the props
- Observe as children use props in the damp sand.

Water Table or Tub

- Place items such as egg beater, wire whisk and plastic squeeze bottles in the water table/tub and allow children to explore with them.
- Invite children to predict what they think will happen as you prepare to add soap flakes to the water table/tub. Add soap flakes. Listen to and observe children and invite them to discuss what is happening as they use the egg beater, wire whisk and plastic bottles in the soapy water.
- Add a washable dog and a brush to the water table.
- Add small plastic boats to the water table.
- Add foam or rubber alphabet letters and an aquarium net to the water table. Involve children in fishing for the alphabet and naming the letters they catch.

Science/Discovery

- Add the wave bottle and invite children to move it and shake it and watch the waves in the bottle.
- Add glitter bottle and invite children to shake it and see what happens.
- Collect four or five clear water bottles of same size. Remove labels. Add different amounts of water to each one, from empty to full. Mix up the bottles and ask children to put them in order from empty to full.

Teacher Note: *Clear and sturdy plastic bottles (Gatorade, whipping cream and single serve juice) work best. Water or soda/cold drink bottles are too flimsy for making sensory bottles.*

Quiet Corner

Learning Goal:

SE2.1 Experiences, expresses, and regulates a range of emotions (*emotion regulation*)

- Create a quiet corner in your classroom; a place where children can go to be alone and to get away from the stresses of group living.
- Place soft items in the quiet corner. Carpet on the floor, soft pillows, and soft and cuddly stuffed animals or dolls are examples.
- Discuss with children when they might want to go to the quiet corner. When they are angry and need to get away from the source of their anger? When they are sad and need to be alone? When the room gets too noisy and they need a quiet spot?
- Explain to children that the quiet corner is for one child at a time.

Teacher Note: *Make sure this area can be supervised by the adults in the classroom at all times.*

Transition Activities

Learning Goal:

CD2.2 Shows flexibility in adjusting thinking and behavior to different contexts (*adjusting behavior to match context*)

Activity: Good Listening Mist

- Take a clean spray bottle, fill it with water and put the tiniest drop of mint or cinnamon flavoring in it. (Please check for allergies first).
- When the children are ready to listen, point the spray at the ceiling and let the mist fall down on the children lightly with a lovely smell.

Activity: Name Card

- Use name cards for transition times. For example, show a name card and help child identify his/her name, then go to the next activity.
- Continue this with all children.

Teacher Note: *Children will quickly learn to recognize own and other's name cards.*

Family Connection and Engagement

Send home a note to families stating that for the next few days, the children will be learning about water.

Suggest some ways families can be involved in the topic of study:

- Collect and bring to the center pictures of water scenes from sources such as magazines and calendars or family pictures.
- Include the titles and authors of some of the children's books about water. Suggest that families look for these books in the local library, check them out and read them with their child.
- Invite parents to bring a life jacket for children to use in dramatic play.

Send home water safety information such as:

- **NEVER** leave children unattended around water. This includes children in the bathtub.
- **ALWAYS** put on life jackets if you are in a boat.