# Little STEAMers Early Learning Program

# Unit #2: Water Remote Learning Activities





### Little STEAMers Early Learning Program

The internationally recognized Illinois Mathematics and Science Academy® (IMSA) develops creative, ethical leaders in science, technology, engineering and mathematics. As a teaching and learning laboratory created by the State of Illinois, IMSA enrolls academically talented Illinois students (grades 10- 12) in its advanced, residential college preparatory program, and it serves thousands of educators and students in Illinois and beyond through innovative instructional programs that foster imagination and inquiry. IMSA also advances education through research, groundbreaking ventures and strategic partnerships. (www.imsa.edu)

# The Shape of Water

# Little STEAMers

Learning Objectives

I can use tools to learn about something new.

I can use words to describe the shape and measurements of

I can describe properties of water.

Fine Motor

Math Skills

**Creative Play** 

**Problem Solving** 

objects.

Skille

# Materials

- *I Get Wet* by Vicki Cobb from your local library or view an animated read aloud
- 6-8 clear containers of varying shapes and sizes\*
- Painter's tape or masking tape
- Water
- Food coloring (optional)
- Eye dropper, nylon baster, large spoon or ladle (optional)

\*Note: A larger, shallow bin may be used to hold all smaller containers and minimize spills as students pour water from one receptacle to another. Alternatively, this activity could be done outside or in a washing area such as a bath tub or shower. Food coloring may be to make the water more visible.

# Exploration

Before exploring the hands-on activity, explain to learners that scientists often work with water because it has interesting **properties**. Encourage students to think about what this word means by asking them to think about properties that are specific to themselves. Students may consider a property about themselves that makes them different from their friend. Students can also list properties of water that set it apart from other substances (sand, paint, shaving cream, etc.) Students may identify that water is transpart, has no smell, no taste, is "wet", makes droplets, etc.

Then, read (or view) Vicki Cobb's book, *I Get Wet*. On the sixth page, readers are presented with the question, **"What shape is water?"** Stop after this page and explain to learners that they will answer this question today by doing an investigation.

Prior to pouring water into any of the containers, ask students to make predictions and observations about their tools:

- What are the tools we are working with today? Tell me about them.
- Which container do you think will hold the most water? Least amount of water? How could we test this?
- What do you think will happen to the water once we pour it into the container?

Then, allow plenty of time for students to pour the water from one container to another. Once students have had adequate time to investigate the materials, they should reflect on their observations:

- What did you investigate today?
- How did you use your tools?
- Today we wanted to answer the question, "What is the shape of water?" What do you think the answer to this question is? Explain.

As an extension to this activity, a ring of painter's tape could be added to each container. Students can then explore volume and capacity by filling each container to the line.

# I Get Wet





### Making a Rainbow STEAMers Materials Learning Objectives I can make a rainbow by shining light into water Curious George Discovers the Rainbow, by H.A. Rey from your local library, or I can identify the colors in my rainbow view a read aloud on YouTube I can document my findings using crayons or markers White Paper 3killa Clear drinking glass half full of water **Problem Solving** A sunny spot\* Hand-Eye Coordination Colorful crayons or markers Scientific Inquiry \*A flashlight may be used if there are no sunny days ahead Exploration

Begin this activity by reading *Curious George Discovers the Rainbow*, by H.A. Rey. If you'd prefer to watch a virtual read aloud, there are options to do so on YouTube. Before you read the story, consider the following with your student(s):

- Have you ever seen a rainbow?
- Where were you? What were the conditions?
- What does a rainbow look like? Can you name the colors?

During and after reading the story, consider the following:

- What kinds of places did George & friends see rainbows?
- Do you think you can make a rainbow like George & Betsy?
  - $\circ$  How did they do it? What materials did they use?

When you have finished discussing the story, gather the materials listed above and find a sunny spot (or flashlight). Explain to the learner that they're going to hold the glass and move it around to try to find the rainbow. Encourage them to try lots of different positions and angles—if they still aren't finding it you may



want to assist. Once the rainbow is seen, ask the learner the following questions, and encourage them to draw what they see onto the white paper.

- What did you have to do to the glass to find the rainbow?
- Did the rainbow stay in one place?
- What colors did you see? Can you draw the rainbow?
- Where do you think the colors come from?





### Refraction: Light and Water Little STEAMer Materials Learning Objectives I can make a prediction of what I think will happen during a 1 glass jar science experiment. 1 cup for pouring water I can make observations and describe what I notice during a science experiment. Water I can explore what happens to light when it passes through 4 Refraction Image Cards\* water. White paper and coloring utensils (optional) cilla \*Note: Four Refraction Image Cards are included in the Language Development attached template. These images contain simple shapes and colors, so students should easily notice the "change" in the pictures. It is also suggested that after investigating **Creative Play** the Refraction Images, students create their own image(s) to place behind the glass jar. Scientific Inquiry

## Exploration

Explain to students that they will be doing a science experiment to learn about **refraction**. Provide each student with the glass jar, cup of water, and allow them to select one of the Refraction Images Cards. Set up the experiment by placing the Refraction Image Card approximately six inches behind the glass jar.

Begin the investigation by having students look through the glass and describe what they see. Explain that water will be poured into the glass. Ask them to **predict** what they believe will happen. Then, slowly pour the water from the cup into the glass jar. Students should still be looking through the glass as the water is poured. Encourage students to discuss what they notice happen to the picture on the Refraction Image Card:

- What happened to the picture on the card?
- Why do you think this happened?
- Do you think this will happen to all of the pictures? Explain.

Students should discuss their observations. If time allows, learners may also draw their own images to place behind the glass jar.

Additional questions for investigation include:

- Does it make a difference how close the water is to the paper?
- Is the size of the glass important? How could we test this?
- Is the shape of the glass important? How could we test this?
- Is the temperature of the water important? How could we test this?

**Refraction** is the bending of light when it passes from one medium to another. In this experiment, light traveled from the air through water. When this happens, the speed of the light slows down and changes its direction when it hits the water. Simply put, light refraction is the bending of light, which contributes to the illusion that the picture on the ØIMS card has changed direction.



Source: What We Do All Day



### Refraction Image Cards













### Things That Float, and Things That Don't



### Materials

- 1 large, clear bowl, container, or sink
- Water
- 8-10 testing objects\*
- 2 large sticky notes or small pieces of paper
- Painter's tape or string
- Writing utensil

\*Note: Testing objects should be of varying sizes, shapes, and made of different materials. Students will enjoy selecting their own materials. Oranges (peeled v. unpeeled), paperclips (placed vertical v. horizontal), wooden blocks, playdoh, plastic beads, plastic building blocks, and sponges provide interesting results. Learners could also collect objects found in nature (i.e., sticks, leaves, acorns, pinecones, etc.) to use as testing materials.

# Leanning Objectives

I can make a prediction of what I think will happen during a science experiment.

I can use words to describe the results of a science experiment.

I can sort objects based on the results of a science experiment.



Problem Solving

Scientific Inquiry

# Exploration

Explain to students that they will be doing a science experiment to learn what makes an object sink or float. Ask students to collect 8-10 testing materials (verify that they are of different sizes, shapes, and materials). Set up the testing area by filling the large bowl or container with water. Then, create a sorting diagram by laying a strip of painter's tape vertically on the surface of a table or on the floor. Write "float" on one sticky note or piece of paper and "sink" on the other, and then situate a card on each side of the painter's tape strip.

Ask students to explain what they believe makes something sink or float. Students may identify simple attributes such as shape, size, or weight of the object.

Before placing each object into the water bowl, students should make a **prediction**. Then, after placing the object into the water and observing the results, students should place the testing material onto the correct side of the sorting area. The following questions encourage scientific investigation:

- Do you think this object will sink or float? What makes you think this?
- What did you notice? Why do you think this happened?
- How should we sort this object based on the results of our experiment?

Once all objects have been tested and sorted, ask students to reflect on the results:

- What do you notice about the objects that floated?
- What do you notice about the objects that sunk?
- What other objects could we test?

This simple experiment allows students to explore the concept of **density**. Objects float, or sink, based on their density, or how closely that item's molecules are clustered. Materials such as rocks, marbles, and playdoh are more dense than water, and will therefore sink. Less dense objects, like feathers, plastic balls, and leaves will float.





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## Mix It In



### Materials

- Clear Glasses (disposable plastic cups may also be used)
- Spoons or Measuring Spoons
- A variety of 'Mixing' materials
  - Salt, Sugar, Pepper, Flour, Baking Soda, Baking Powder, Food Coloring, Sand, Dirt, Oil, etc...
- Data Sheet\*

\*A data sheet is provided on the next page, or you can create your own using a pen and paper

### Exploration

# Explain to learners that they will be doing a science experiment to explore how different materials behave in water. They will be following a **procedure**—using the same steps to test a number of different materials. You will need to gather some 'mixing' materials (at least 4-5, see suggestions above), and enough clear glasses or

plastic cups filled ¾ with water to test each material. Before you begin, allow learners ample time to observe each material and record observations using words or drawings on the data sheet. Talking points you may want to consider:

- What does <the material> look like?
- What do we use <this material> for?
- What do you think will happen when we mix it with water?

When you are ready to begin, follow the **procedure** for each material, and record the results using words or drawings on the data sheet. Some questions to guide their analysis could be:

- What happened to <the material> when you mixed it with the water?
- What happened to the water after you mixed <the material> into it?
- Did any of the materials disappear in the water? Which ones?
- Did any of the materials not mix with the water? Which ones?
- What else could we mix with water? What do you think would happen?



### **Procedure**

- 1. Get 1 teaspoon of the material
- 2. Drop it in the water
- 3. Using a spoon or straw, mix the material into the water for 30 seconds
- Record what you see using words or pictures in the data table



## I can follow the steps of a scientific procedure

Learning Objectives

I can document my findings using drawings or words

I can determine what happens to different materials in

### Skille

water

Problem Solving

Data Table: Mix It In				
Material	Observations	Prediction	Observations	
	Before Mixing	Will it Mix?	After Mixing	
		Yes / No		
	· · · · · · · · · · · · · · · · · · ·	Yes / No		
		Yes / No		
		Yes / No		
		Yes / No		



# Design Challenge: Keepin' Dry



### Materials

- 'George Left Toy in the Rain' video clip on YouTube\*
- Eye dropper (or something to deliver controlled drops of water)
- Testing Materials, such as: aluminum foil, wax paper, saran wrap, ziploc bags, paper, cardboard, newspaper, paper towel, etc...
- Water
- Building Materials (tape, glue, etc...)
- Data Table (attached)
- A familiar toy

\*https://www.youtube.com/watch?v=O9w4ttbrbsE

### Exploration

Begin this activity by watching *George Left Toy in the Rain* on YouTube. During and after the video clip, you can discuss the following in order to prepare for the activity:

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	-		•	-
	2	3		-

- What was the problem in this story?
- Have you ever left a toy in the rain? What happened?
- How did they get the toy dry again?
- What could you do BEFORE the rain started to protect the toy?

Explain to the learner that they are going to design and build something that could protect one of their own toys from the rain. They will do this in three parts (you can have them complete each part on a different day if you wish).

Part 1: Test Materials	Part 2: Design a Solution	Part 3: Build a Product
In part 1, learners test and explore	Discuss the results from Part 1	Tell learners that their plan from
a number of different materials	with learners. Which materials	Part 2 is their 'blueprint', and they
and decide if they <b>repel</b> or <b>absorb</b>	repelled water? Which absorbed	are going to use it to build their
water. Recommended materials	it? What does this mean? Which	product. Give them ample time to
are listed above, but feel free to	materials would be the best for	build, allowing for redesign if
use whatever you have available.	protection in the rain? Using the	necessary. When the product is
Allow learners to drop water onto	given planning space, allow	complete, try to test it and see if it
each material, make	students to discuss and draw a	successfully keeps a toy dry in the
obeservations, and record their	possible solution using the best	rain!
results in the attached data table.	materials to protect their toy.	<b>⊚IMSA</b>

### Learning Objectives

I can test materials to see if they repel or absorb water

I can design a structure or device to keep a toy dry in the rain

I can build a structure or device based on my plans



Problem Solving



Fine Motor

Scientific Inquiry



# Data Sheet

Material	Absorbs Water	Repels Water
Example: Kleenex	X	

# Planning Space





# Standards Index

## Illinois Early Learning and Development Standards

### Language Arts

IELDS 1.A: Demonstrate understanding through age-appropriate responses

- Remote Unit 2: Water—The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In, Making a Rainbow, Design Challenge: Keepin' Dry
- IELDS 1.B: Communicate effectively using language appropriate to the situation and audience
- IELDS 1.C: Use language to convey information and ideas
  - Remote Unit 2: Water—Mix It In
- IELDS 1.D: Speak using conventions of Standard English
- Remote Unit 2: Water—Mix It In, Design Challenge: Keepin' Dry
- IELDS 1.E: Use increasingly complex phrases, sentences, and vocabulary
  - Remote Unit 2: Water—Mix It In
- IELDS 2.A: Demonstrate interest in stories and books
- Remote Unit 2: Water— The Shape of Water, Making a Rainbow
- IELDS 2.B: Recognize key ideas and details in stories
- Remote Unit 2: Water— Making a Rainbow
- IELDS 2.C: Recognize concepts of books
- Remote Unit 2: Water— The Shape of Water
- IELDS 2.D: Establish personal connections with books
- Remote Unit 2: Water— Making a Rainbow
- IELDS 3.A: Recognize key ideas and details in nonfiction text
  - Remote Unit 2: Water—The Shape of Water
- IELDS 3.B: Recognize features of nonfiction books
- IELDS 4.A: Demonstrate increasing awareness of and competence in emergent reading skills and abilities
- IELDS 4.B: Demonstrate an emerging knowledge and understanding of the alphabet
- IELDS 4.C: Demonstrate an emerging understanding of spoken words, syllables, and sounds (phonemes).
- IELDS 4.D: Demonstrate emergent phonics and word-analysis skills
- IELDS 5.A: Demonstrate growing interest and abilities in writing
  - Remote Unit 2: Water—Mix It In
- IELDS 5.B: Use writing to represent ideas and information
  - Remote Unit 2: Water— Mix It In
- IELDS 5.C: Use writing to research and share knowledge
  - Remote Unit 2: Water—The Shape of Water

### **Mathematics**

- IELDS 6.A: Demonstrate and apply a knowledge and sense of numbers, including numeration and operations
- IELDS 6.B: Add and subtract to create new numbers and begin to construct sets
- IELDS 6.C: Begin to make reasonable estimates of numbers
- IELDS 6.D: Compare quantities using appropriate vocabulary terms
- IELDS 7.A: Measure objects and quantities using direct comparison methods and nonstandard units
  - Remote Unit 2: Water—The Shape of Water, Mix It In, Making a Rainbow, Design Challenge: Keepin' Dry
- IELDS 7.B: Practice estimating in everyday play and everyday measurement problems
- Remote Unit 2: Water—The Shape of Water, Mix It In, Design Challenge: Keepin' Dry
- IELDS 7.C: Explore tools used for measurement
- IELDS 8.A: Explore objects and patterns
- Remote Unit 2: Water— Things That Float and Things That Don't, Refraction: Light and Water, Mix It In IELDS 8.B: Describe and document patterns using symbols
- IELDS 9.A: Recognize, name, and match common shapes
- IELDS 9.B: Demonstrate an understanding of location and ordinal position, using appropriate vocabulary
  - Remote Unit 2: Water— Design Challenge: Keepin' Dry
- IELDS 10.A: Generate questions and processes for answering them
  - Remote Unit 2: Water— Mix It In, Making a Rainbow

IELDS 10.B: Organize and describe data and information

• Remote Unit 2: Water— Things That Float and Things That Don't, Refraction: Light and Water, Mix It In IELDS 10.C: Determine, describe, and apply the probabilities of events

#### <u>Science</u>

IELDS 11.A: Develop beginning skills in the use of science and engineering practices, such as observing, asking questions, solving problems, and drawing conclusions

- Remote Unit 2: Water— The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In, Making a Rainbow, Design Challenge: Keepin' Dry
- IELDS 12.A: Understand that living things grow and change
- IELDS 12.B: Understand that living things rely on the environment and/or others to live and grow

IELDS 12.C: Explore the physical properties of objects

- Remote Unit 2: Water—Things That Float and Things That Don't, Mix It In, Design Challenge: Keepin' Dry
- IELDS 12.D: Explore concepts of force and motion
- IELDS 12.E: Explore concepts and information related to the Earth, including ways to take care of our planet
- Remote Unit 2: Water—The Shape of Water, Refraction: Light and Water, Making a Rainbow
- IELDS 12.F: Explore changes related to weather and seasons
- Remote Unite 2: Water—Design Challenge: Keepin' Dry
- IELDS 13.A: Understand rules to follow when investigating and exploring
- IELDS 13.B: Use tools and technology to assist with science and engineering investigations
  - Remote Unit 2: Water— The Shape of Water, Making a Rainbow

#### **Social Studies**

IELDS 14.A: Understand what it means to be a member of a group and community IELDS 14.B: Understand the structures and functions of the political systems of Illinois, the United States, and other nations IELDS 14.C: Understand ways groups make choices and decisions

IELDS 14.D: Understand the role that individuals can play in a group or community

IELDS 14.E: Understand United States foreign policy as it relates to other nations and international issues

IELDS 14.F: Understand the development of United States' political ideas and traditions

IELDS 15.A: Explore roles in the economic systems and human interdependence

IELDS 15.B: Explore issues of limited resources in the early childhood environment and world

IELDS 15.C: Understand that scarcity necessitates choices by producers

IELDS 15.D: Explore concepts about trade as an exchange of goods or services

IELDS 15.E: Understand the impact of government policies and decisions on production and consumption in the economy

IELDS 16.A: Develop an awareness of the self and his or her uniqueness and individuality

IELDS 16.B: Understand the development of significant political events

IELDS 16.C: Understand the development of economic systems

IELDS 16.D: Understand Illinois, United States, and world social history

IELDS 16.E: Understand Illinois, United States, and world environmental theory

IELDS 17.A: Explore environments and where people live

IELDS 17.B: Analyze and explain characteristics and interactions of the Earth's physical systems

IELDS 17.C: Understand relationships between geographic factors and society

IELDS 17.D: Understand the historical significance of geography

IELDS 18.A: Explore people, their similarities, and their differences

IELDS 18.B: Develop an awareness of self within the context of family

IELDS 18.C: Understand how social systems form and develop over time

#### **Physical Development and Health**

IELDS 19.A: Demonstrate physical competency and control of large and small muscles

• Remote Unit 2: Water— The Shape of Water, Mix It In, Making a Rainbow

IELDS 19.B: Demonstrate awareness and coordination of body movements

IELDS 19.C: Demonstrate knowledge of rules and safety during activity

IELDS 20.A: Achieve and maintain a health-enhancing level of physical fitness

IELDS 20.B: Assess individual fitness levels

IELDS 20.C: Set goals based on fitness data and develop, implement, and monitor an individual fitness improvement plan

IELDS 21.A: Demonstrate individual responsibility during group physical activities

IELDS 21.B: Demonstrate cooperative skills during structured group physical activity

IELDS 22.A: Explain the basic principles of health promotion, illness prevention, treatment, and safety

IELDS 22.B: Describe and explain the factors that influence health among individuals, groups, and communities

IELDS 22.C: Explain how the environment can affect health

IELDS 23.A: Describe and explain the structure and functions of the human body systems and how they interrelate

IELDS 23.B: Identify ways to keeps the body healthy

IELDS 23.C: Describe factors that affect growth and development

IELDS 24.A: Demonstrate procedures for communicating in positive ways, resolving differences, and preventing conflict

IELDS 24.B: Apply decision-making skills related to the protection and promotion of individual health

IELDS 24.C: Demonstrate skills essential to enhancing health and avoiding dangerous situations

#### The Arts

IELDS 25.A: Investigate, begin to appreciate, and participate in the arts IELDS 25.B: Display an awareness of some distinct characteristics of the arts IELDS 26.A: Understand processes, traditional tools, and modern technologies used in the arts IELDS 26.B: Understand ways to express meaning through the arts IELDS 27.A: Analyze how the arts function in history, society, and everyday life IELDS 27.B: Understand how the arts shape and reflect history, society, and everyday life

#### English Language Learner Home Language Development

IELDS 28.A: Use the home language at age-appropriate levels for a variety of social and academic purposes

IELDS 29.A: Use the home language to attain benchmarks across all the learning areas and to build upon and develop transferable language and literacy skills

#### Social/Emotional Development

IELDS 30.A: Identify and manage one's emotions and behavior

IELDS 30.B: Recognize own uniqueness and personal qualities

IELDS 30.C: Demonstrate skills related to successful personal and school outcomes

- Remote Unit 2: Water— The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In, Design Challenge: Keepin' Dry
- IELDS 31.A: Develop positive relationships with peers and adults

IELDS 31.B: Use communication and social skills to interact effectively with others

IELDS 31.C: Demonstrate an ability to prevent, manage, and resolve interpersonal conflicts in constructive ways

IELDS 32.A: Begin to consider ethical, safety, and societal factors in making decisions

IELDS 32.B: Apply decision-making skills to deal responsible with daily academic and social situations

Remote Unit 2: Water—Design Challenge: Keepin' Dry

IELDS 32.C: Contribute to the well-being of one's school and community

### Missouri Early Learning Goals

### **Approaches to Learning**

MO ELG.I.1: Shows curiosity

• Remote Unit 2: Water— The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In, Making a Rainbow, Design Challenge: Keepin' Dry

MO ELG.I.2: Takes Initiative

• Remote Unit 2: Water—The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water

MO ELG.I.3: Exhibits creativity and inventiveness

• Remote Unit 2: Water— Design Challenge: Keepin' Dry

MO ELG.I.4: Shows confidence

MO ELG.I.5: Displays persistence

• Remote Unit 2: Water— The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In MO ELG.I.6: Uses problem-solving skills

Remote Unit 2: Water—Design Challenge: Keepin' Dry

### Social and Emotional Development

MO ELG.II.A.1: Exhibits self-awareness and self-confidence MO ELG.II.A.2: Manages feelings and behavior MO ELG.II.B.1: Builds relationships

### **Physical Development, Health and Safety**

MO ELG.III.A.1: Uses gross motor skills with purpose and collaboration MO ELG.III.A.2: Uses fine motor skills with purpose and control

• Remote Unit 2: Water— The Shape of Water, Mix It In, Making a Rainbow, Design Challenge: Keepin' Dry

MO ELG.III.A.3: Responds to sensory input to function in the environment MO ELG.III.B.1: Practices healthy behaviors MO ELG.III.C.1: Practices safe behaviors

#### Language and Literacy

MO ELG.IV.A.1: Represents feelings and ideas in a variety of ways MO ELG.IV.B.1: Listens for different purposes

- Remote Unit 2: Water—The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In, Design Challenge: Keepin' Dry
- MO ELG.IV.C.1: Uses language to communicate
  - Remote Unit 2: Water—Things That Float and Things That Don't
- MO ELG.IV.C.2: Develops and expands vocabulary
- MO ELG.IV.D.1: Applies early reading skills
  - Remote Unit 2: Water— The Shape of Water
- MO ELG.IV.D.2: Uses concepts of print
- MO ELG.IV.D.3: Attends to sounds in language (phonological awareness)
- MO ELG.IV.E.1: Uses writing as a means of expression/communication
  - Remote Unit 2: Water— Mix It In, Making a Rainbow

#### **Mathematics**

MO ELG.V.A.1: Uses number to show quantity

- MO ELG.V.A.2: Uses language to represent number of objects
- MO ELG.V.A.3: Solves problems using number
- MO ELG.V.A.4: Uses numerical representation
- MO ELG.V.B.1: Uses language to represent number of objects
- MO ELG.V.B.2: Uses numerical representations
- MO ELG.V.C.1: Uses language to represent number of objects
- MO ELG.V.D.1: Makes comparisons
- Remote Unit 2: Water— Design Challenge: Keepin' Dry
- MO ELG.V.D.2: Uses measurement
- Remote Unit 2: Water—The Shape of Water
- MO ELG.V.D.3: Collects, organizes, and displays information (charting and graphing)
- Remote Unit 2: Water— Things That Float and Things That Don't, Making a Rainbow, Design Challenge: Keepin' Dry
- MO ELG.V.E.1: Investigates positions and locations
  - Remote Unit 2: Water— Refraction: Light and Water
- MO ELG.V.E.2: Explores shapes in the environment

### **Science**

MO ELG.VI.A.1: Explores physical properties of objects and materials

- Remote Unit 2: Water— The Shape of Water, Making a Rainbow
- MO ELG.VI.A.2: Investigates properties of objects and materials
  - Remote Unit 2: Water— The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In, Design Challenge: Keepin' Dry
- MO ELG.VI.A.3: Solves problems involving physical properties of objects and materials
  - Remote Unit 2: Water— The Shape of Water, Things That Float and Things That Don't, Refraction: Light and Water, Mix It In, Design Challenge: Keepin' Dry
- MO ELG.VI.A.4: Represents observations of the physical world in a variety of ways
- Remote Unit 2: Water— Mix It In, Design Challenge: Keepin' Dry
- MO ELG.VI.B.1: Explores characteristics of living things
- MO ELG.VI.B.2: Investigates characteristics of living things
- MO ELG.VI.B.3: Solves problems related to living things
- MO ELG.VI.B.4: Represents observations about living things in a variety of ways
- MO ELG.VI.C.1: Explores properties of earth and sky
- Remote Unit 2: Water—Making a Rainbow
- MO ELG.VI.C.2: Investigates properties of earth and sky
- MO ELG.VI.C.3: Solves problems involving earth and sky
- MO ELG.VI.C.4: Represents observations about earth and sky in a variety of ways
  - Remote Unit 2: Water—Making a Rainbow

#### **Understanding the World**

MO ELG.VII.A.1: Explores family

MO ELG.VII.B.1: Shows interest in people and the community

MO ELG.VII.B.2: Explores people and the community

MO ELG.VII.C.1: Investigates mechanical devices

Remote Unit 2: Water— Rainbow Race, Can You Hear Colors?, Now You See It, Now You Don't

MO ELG.VII.C.3: Investigates electronic devices

• Remote Unit 2: Water—A Garden of Colors, Rainbow Race, Can You Hear Colors?

### Expressive Arts

MO ELG.VIII.A.1: Shows interest in music and movement MO ELG.VIII.A.2: Explores music and movement • Remote Unit 2: Water— Can You Hear Colors?

MO ELG.VIII.B.1: Shows interest in visual arts

Remote Unit 2: Water— A Garden of Colors, Rain Paint, Now You See It, Now You Don't

MO ELG.VIII.B.2: Explores visual arts

Remote Unit 2: Water— A Garden of Colors, Rain Paint

MO ELG.VIII.C.1: Shows interest in dramatic arts

MO ELG.VIII.C.2: Explores dramatic arts

