Categorizing: Sorting Weather

Head Start Activity

Description: Children will sort pictures by the weather that they are related to.

Materials

- Sorting Signs (Sunny Weather, Cold Weather, Rainy Weather)
- A variety of pictures to sort into categories

Set Up

- Invite participants to categorize the different pictures based on what weather they are related to.
- Put materials onto the tables and have room for children/families to work together.

Head Start Early Learning Outcome Framework Alignment

Goal P-SCI 2. Child engages in scientific talk.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	**48 to 60 Months**	**By 60 Months**
Begins to use scientific vocabulary words with modeling and support from an adult. Sometimes repeats new words offered by adults.	Uses a greater number of scientific vocabulary words. Repeats new words offered by adults and may ask questions about unfamiliar words.	• Uses scientific practice words or signs, such as observe, describe, compare, contrast, question, predict, experiment, reflect, cooperate, or measure. • Uses scientific content words when investigating and describing observable phenomena, such as parts of a plant, animal, or object.

Goal P-SCI 3. Child compares and categorizes observable phenomena.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	**48 to 60 Months**	**By 60 Months**
Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

This program was made possible by the Institute of Museum and Library Services

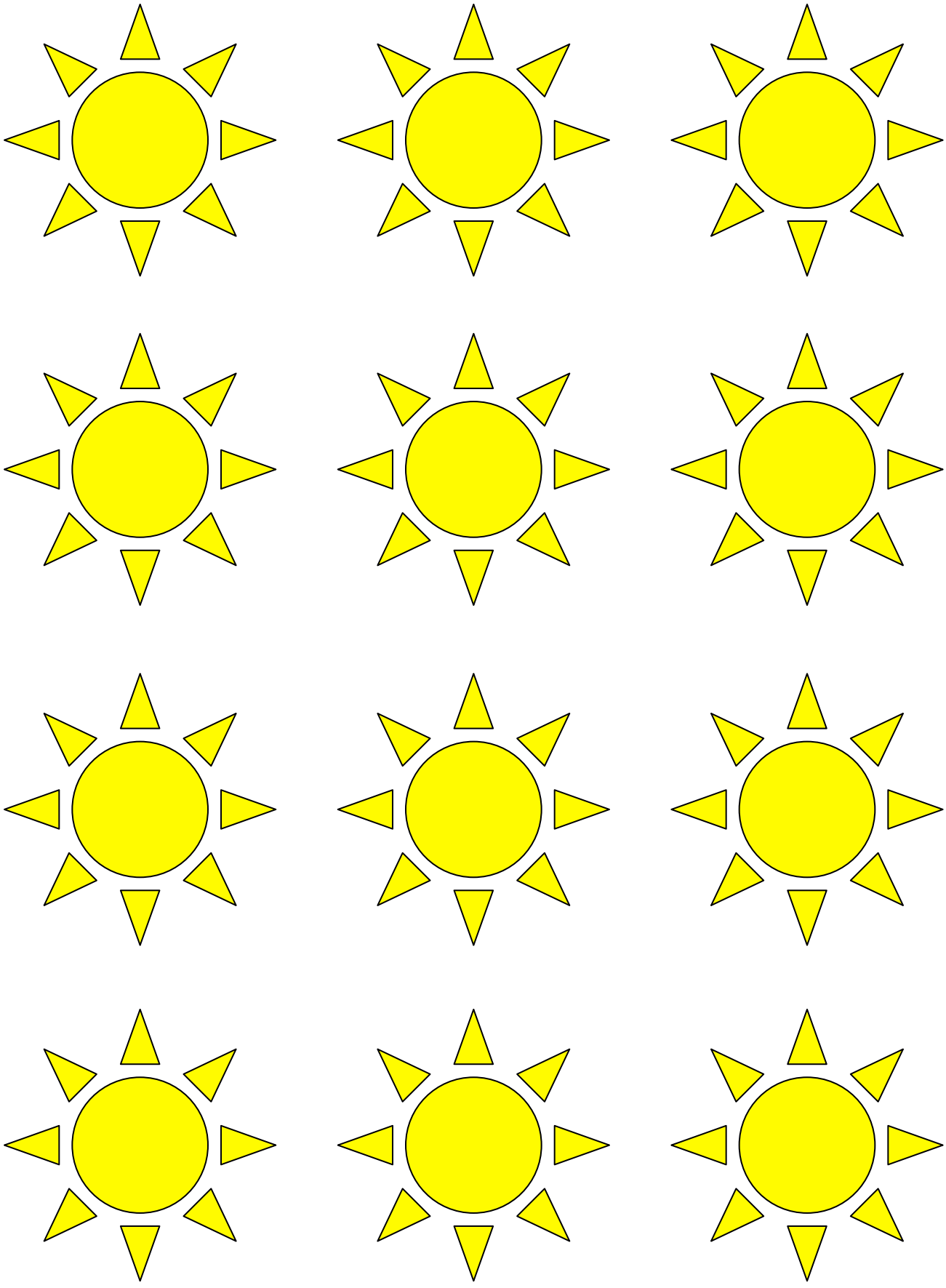
Start Early Learning Outcome Framework." *Head Start Early Learning Outcome Framework*, Office of Head Start. https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/elof-ohs-framework.pdf

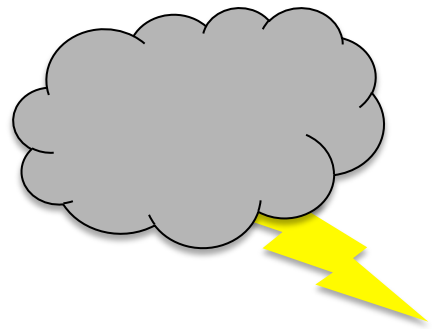
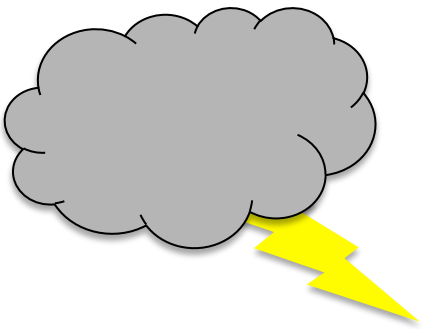
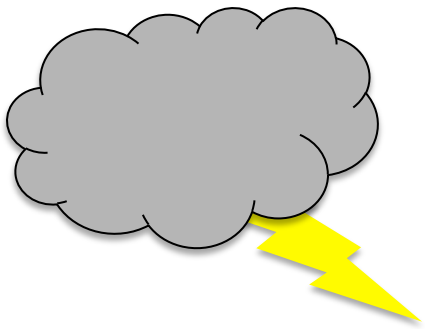
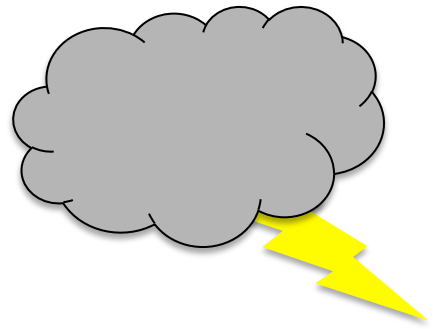
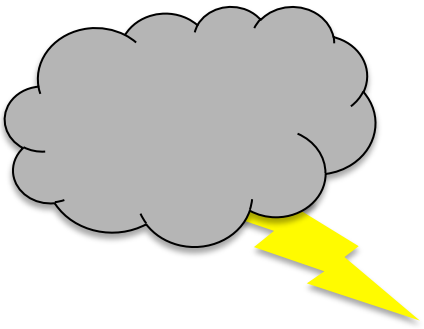
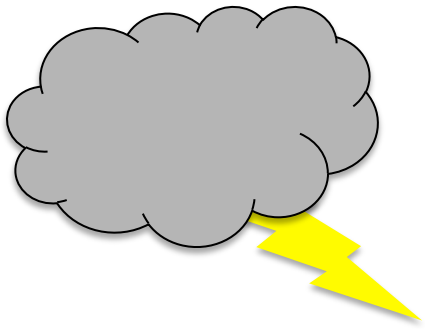
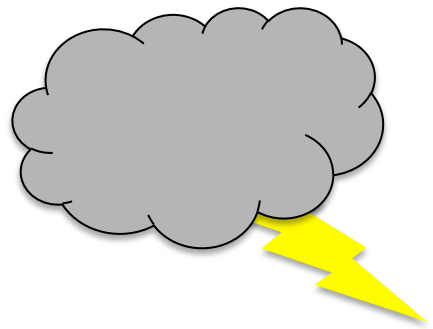
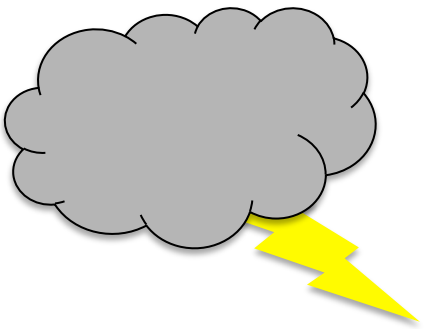
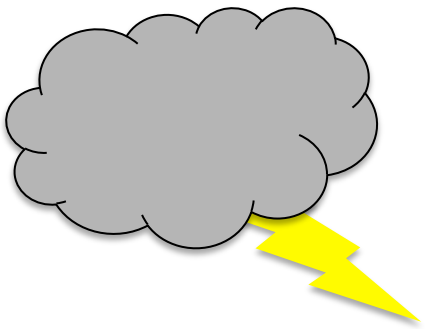
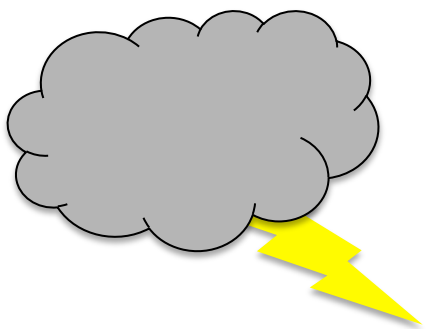
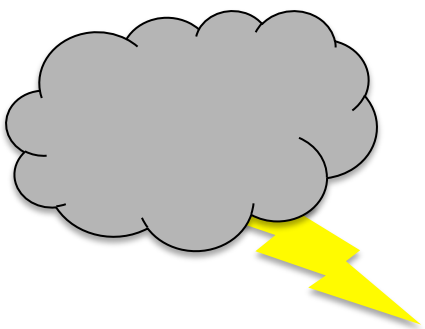
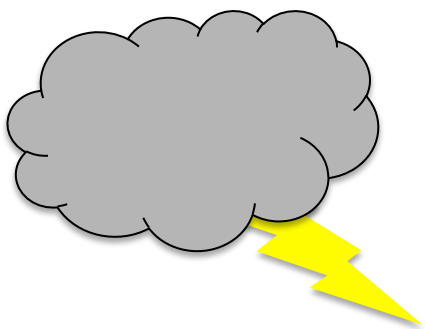
Suggestions for Teaching

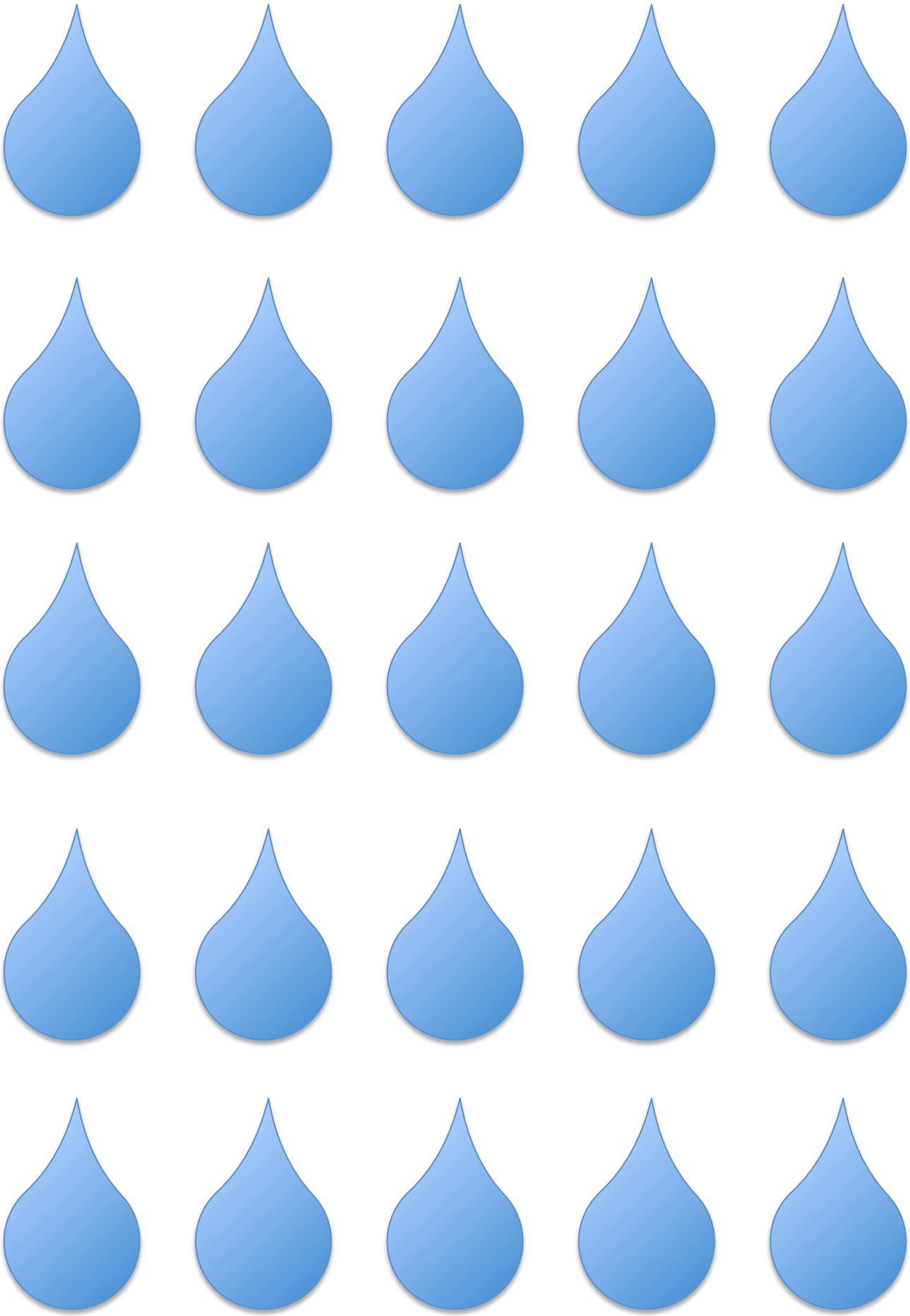
Depending on the age of the children, this activity will look different. This is an open ended and exploratory activity, there is no wrong way to do it! Keeping that in mind, here are some suggestions:

Here are some activity extensions and adaptations:

- Challenge the kids to sort the pictures based on the weather they see and don't see outside that day.
- Have kids make their own drawings and then sort them into categories.
- Have the kids draw different clothing items and sort them based on the different weather categories.





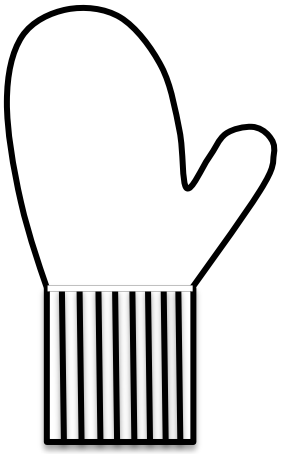
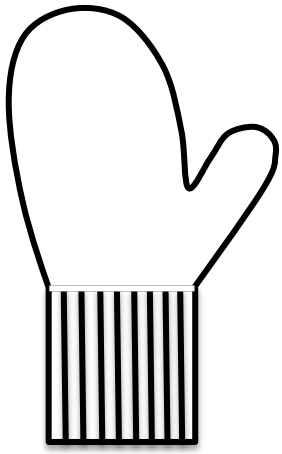
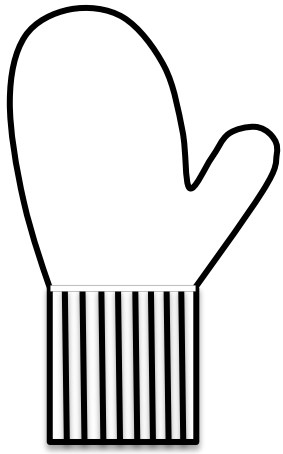
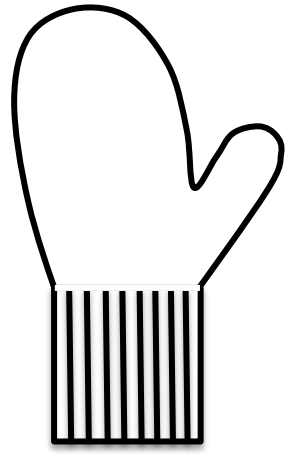
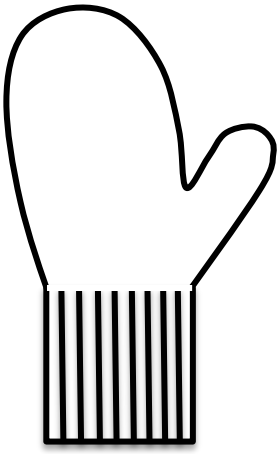
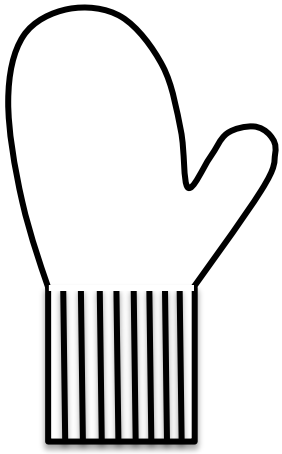
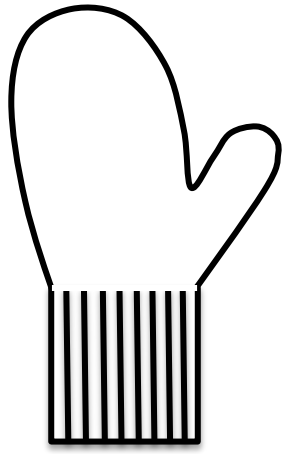
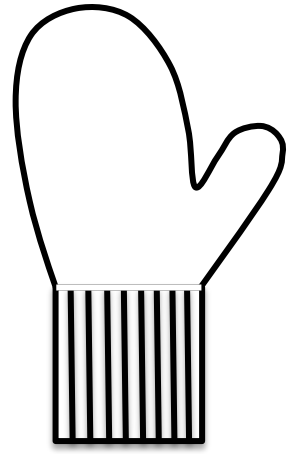
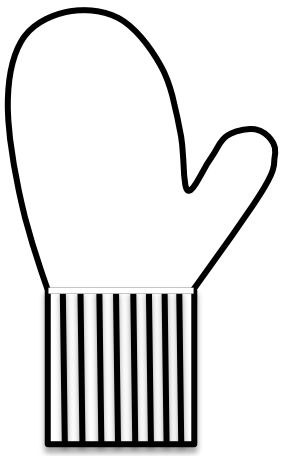
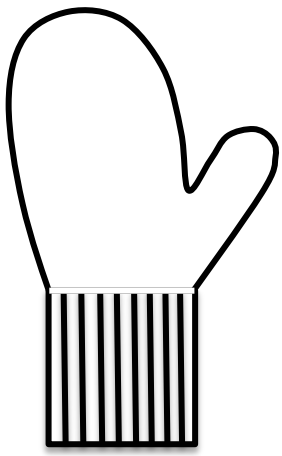
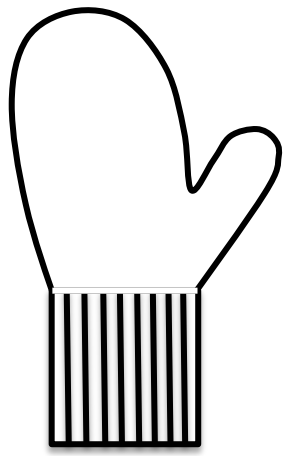
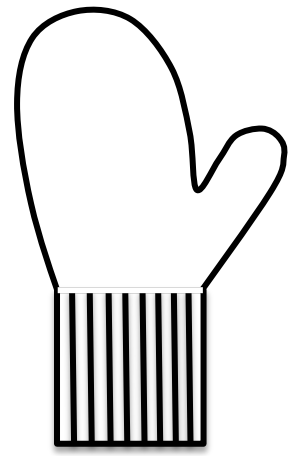










Cold Weather

Rainy Weather

Hot Weather

Predicting: Sink or Float

Head Start Activity

Description: Children will experiment and explore what objects sink or float!

Materials

- Objects that float and sink
- Large clear bins of water
- Towels

Set Up

- Set up stations with bins of water on the tables.
- Place a variety of objects at each of the water stations.
- Invite children to pick an item and predict whether it will sink or float when you drop it in the water.
- Once they place the item in the water make an observation about what happened.

Head Start Early Learning Outcome Framework Alignment

Goal P-SCI 4. Child asks a question, gathers information, and makes predictions.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	**48 to 60 Months**	**By 60 Months**
Asks simple questions. Uses adults as primary resources to gather information about questions. With adult support and modeling, makes simple predictions, such as "I think that the golf ball will be heavier than the ping pong ball."	Asks more complex questions. Uses other sources besides adults to gather information, such as books, or other experts. Uses background knowledge and experiences to make predictions.	• Asks questions that can be answered through an investigation, such as "What do plants need to grow?" or "What countries do the children in our class come from?". • Gathers information about a question by looking at books or discussing prior knowledge and observations. • Makes predictions and brainstorms solutions based on background knowledge and experiences, such as "I think that plants need water to grow." or "I think adding yellow paint to purple will make brown."

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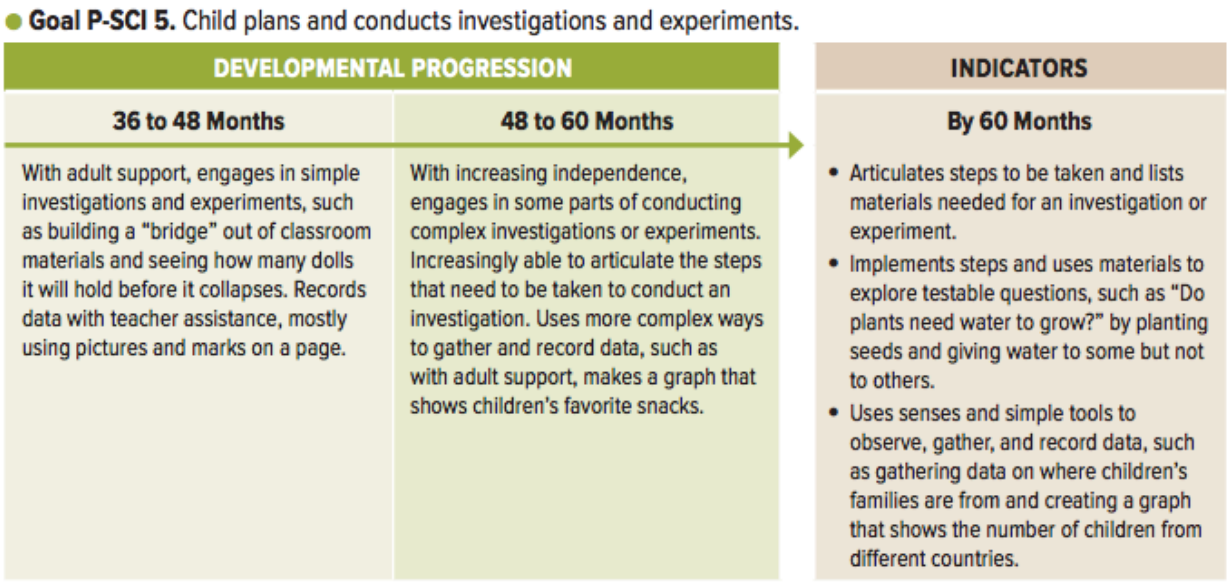

These images have been adapted from: U.S. Department of Health and Human Services, Administration for Children and Families. "Head Start Early Learning Outcome Framework." *Head Start Early Learning Outcome Framework*, Office of Head Start. https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/elof-ohs-framework.pdf

Suggestions for Teaching

Depending on the age of the children, this activity will look different. This is an open ended and exploratory activity, there is no wrong way to do it! Keeping that in mind, here are some suggestions:

Here are some activity extensions and adaptations:

- Have the children sort all of the objects between float and sink before putting them in the water.
- Challenge the children to take one of the items that floats and get it to sink, and vice versa.
- Try using different foods from your kitchen before you eat them.

Categorizing: Animal Sorting

Head Start Activity

Description: Children will experiment with sorting animals into a variety of different categories.

Materials

- A variety of plastic animals

Set Up

- Provide children with a variety of plastic animals.
- Let children decide how they would like to sort the animals, and then let them start making groups.

Head Start Early Learning Outcome Framework Alignment

Goal P-SCI 3. Child compares and categorizes observable phenomena.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	**48 to 60 Months**	**By 60 Months**
Sorts objects into groups based on simple attributes, such as color. With support, uses measurement tools to quantify similarities and differences of observable phenomena, such as when a child scoops sand into two containers and with adult assistance, determines which container holds more scoops.	With increasing independence, sorts objects into groups based on more complex attributes, such as weight, sound, or texture. Uses measurement tools to assess the properties of and compare observable phenomena.	• Categorizes by sorting observable phenomena into groups based on attributes such as appearance, weight, function, ability, texture, odor, and sound. • Uses measurement tools, such as a ruler, balance scale, eye dropper, unit blocks, thermometer, or measuring cup, to quantify similarities and differences of observable phenomena.

Goal P-MATH 1. Child knows number names and the count sequence.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	**48 to 60 Months**	**By 60 Months**
Says or signs some number words in sequence (up to 10), starting with one. Understands that counting words are separate words, such as "one," "two," "three" versus "onetwothree".	Says or signs more number words in sequence.	• Counts verbally or signs to at least 20 by ones.

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Adapted from U.S. Department of Health and Human Services, Administration for Children and Families. "Head Start Early Learning Outcome Framework." *Head Start Early Learning Outcome Frameowrk,* Office of Head Start. https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/elof-ohs-framework.pdf

Suggestions for Teaching

Depending on the age of the children, how it is presented will look different. This is a very open ended, exploration activity. Keeping that in mind, here are some suggestions:

Here are some activity extensions and adaptations:

- Challenge children to first create 1 category that unites all animals, followed by 2, 3, and 4 different categories.
- Place the animals in a sensory area to explore and participate in dramatic play.
- Place the animals in different containers to make different noisemakers and maybe even try to sort the noise makers by type of animal that children predict are inside.

Credits and rights

Developed by the Sciencenter for the Collaborative for Early Science Learning.
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This project was made possible in part by the Institute of Museum and Library Services