

Description: Children will use blocks, rulers, hands, and other tools to measure items around the room.

Materials

- Blocks
- Rulers
- Markers
- Other items from around the room

Set Up

- Invite children to use different items to measure things around the room.

Head Start Early Learning Outcome Framework Alignment

- **Goal P-MATH 8.** Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	48 to 60 Months	By 60 Months
With adult support, begins to understand that attributes can be compared, such as one child can be taller than another child.	With some adult support, uses measurable attributes to make comparisons, such as identifies objects as the same/different and more/less.	<ul style="list-style-type: none"> • Measures using the same unit, such as putting together snap cubes to see how tall a book is. • Compares or orders up to 5 objects based on their measurable attributes, such as height or weight. • Uses comparative language, such as shortest, heavier, or biggest.

● **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.	
		<ul style="list-style-type: none"> • 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.

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:

- Draw large-scale pictures of different animals and have them measure how many hands, feet, etc., long they are.
- Challenge them to find things that are three blocks tall, five hands tall, etc.
- Go on a scavenger hunt outside and see who can find the tallest tree, shortest tree, etc.

Description: Families will draw a funny face and plant seeds to grow grass hair.

Materials

- Cups with lids
- Grass Seed
- Soil
- Crayons
- Measuring cups
- Watering can

Set Up

- Allow children to choose a cup and let them decorate it using crayons.
- Help the children measure soil into their cups and place the seeds in the soil.
- Give kids a lid for their cup

Head Start Early Learning Outcome Framework Alignment

● **Goal P-MATH 8.** Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	48 to 60 Months	<p style="text-align: center;">By 60 Months</p> <ul style="list-style-type: none"> • Measures using the same unit, such as putting together snap cubes to see how tall a book is. • Compares or orders up to 5 objects based on their measurable attributes, such as height or weight. • Uses comparative language, such as shortest, heavier, or biggest.
<p>With adult support, begins to understand that attributes can be compared, such as one child can be taller than another child.</p>	<p>With some adult support, uses measurable attributes to make comparisons, such as identifies objects as the same/different and more/less.</p>	

● **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.	<ul style="list-style-type: none"> 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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Suggestions for Teaching

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Here are some activity extensions and adaptations:

- Have kids measure their grass and chart the results.
- Experiment with different types of seeds.
- Try placing one grass seed cup in the sun and one in a dark place and compare what happens.

Description: Children test different paper air places and measure how far they travel.

Materials

- Copy paper
- Paper clips
- Measuring tape
- Rulers
- Instructions on how to make a plane

Set Up

- Depending on age, the paper airplanes can be made ahead of time, or the children can make them.
- Make a starting line and have everyone through their airplane from that line.
- Ask children how many steps they think it will take to get their airplane
- Suggest they measure using rulers or tape measures.

Head Start Early Learning Outcome Framework Alignment

● **Goal P-MATH 8.** Child measures objects by their various attributes using standard and non-standard measurement. Uses differences in attributes to make comparisons.

DEVELOPMENTAL PROGRESSION		INDICATORS
36 to 48 Months	48 to 60 Months	By 60 Months
With adult support, begins to understand that attributes can be compared, such as one child can be taller than another child.	With some adult support, uses measurable attributes to make comparisons, such as identifies objects as the same/different and more/less.	<ul style="list-style-type: none"> • Measures using the same unit, such as putting together snap cubes to see how tall a book is. • Compares or orders up to 5 objects based on their measurable attributes, such as height or weight. • Uses comparative language, such as shortest, heavier, or biggest.

● **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.	<ul style="list-style-type: none"> 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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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:

- Try rolling different items across the room and having children measure how far they go.
- Experiment with adding paper clips to the airplanes.
- Encourage the children to come up with their own paper airplanes.

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