

STEM Lab

February 2020

Challenge: Build a Snow Scooper

Objectives

- Freely explore materials at a developmentally appropriate level

Materials

- Wooden Craft Sticks
- Index Cards
- Tape
- Sensory Table, Bins, or Trays
- Sand, Snow, or another sensory material
- Measuring cups, funnels
- Optional: Younger children could build with Legos, PVC pipes, or connecting blocks

Activities

- Work individually to build a snow scooper or plow
- Use scooper or plow to move sensory materials around trays
- Use scooper or plow to fill measuring cups
- Count how many scoops of sensory materials needed to fill different sized cups
- Observe how efficient scoopers/plows are in moving sensory materials
- Problem-solve to build better designs
- Compare different shaped scoopers/plows
- Weigh sensory materials scooped using pan balance

Variations:

- Find other connecting blocks to create scoopers with
- Attach scoopers/plows to vehicles
- Use other materials (binder clips, clothespins, recycled materials, paper, straws, etc) to build scooper
- Use scoopers/plows to write letters, numbers, draw shapes
- Older children can plan by drawing out designs before building

Curriculum Connections

- Count sequentially
- Identify shapes, understand their properties and create new shapes
- Use standard and non-standard measurement tools to problem solve or plan
- Understand geometry concepts such as more/less, lighter/heavier
- Use what, why, where, and how questions appropriately and sequentially
- Demonstrate persistence in problem solving
- Identify physical properties such as shape and texture
- Use tools in purposeful ways that support discovery
- Examine, describe, compare, and contrast the physical properties of two objects or materials



Garden Works

February 2020

<i>Sprouting Carrot Tops</i>	Toddlers	Twos	Preschool	Kindergarten Prep
Objectives	<ul style="list-style-type: none"> To examine, describe, compare, and contrast the physical properties of objects and materials 			
Materials	<ul style="list-style-type: none"> Carrot top Shallow dish 10 cotton balls Water Garden felt play board and pieces 	<ul style="list-style-type: none"> Carrot top Shallow dish 10 cotton balls Water Garden felt play board and pieces 	<ul style="list-style-type: none"> Carrot top Shallow dish 10 cotton balls Water Magnifying glasses 	<ul style="list-style-type: none"> Carrot top Shallow dish 10 cotton balls Water Journal Ruler (Measure the height)
Activities	<ul style="list-style-type: none"> Activity #1: Sprouting Carrot tops- A beautiful classroom plant Activity #2: Garden felt play board and pieces Books: The Carrot Seed by Ruth Krauss 	<ul style="list-style-type: none"> Activity #1: Sprouting Carrot tops- A beautiful classroom plant Activity #2: Garden felt play board and pieces Books: The Carrot Seed by Ruth Krauss <ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Activity #1: Sprouting Carrot tops- A beautiful classroom plant Activity #3 Carrot diagram label the parts of a carrot Books: <ul style="list-style-type: none"> Creepy Carrots! by Aaron Reynolds Carrot Soup by John Segal 	<ul style="list-style-type: none"> Activity #1: Sprouting Carrot tops- A beautiful classroom plant Activity #4 Record findings <ul style="list-style-type: none"> Curious George The Perfect Carrot by PBS kids (Level 1) Too Many Carrots by Katy Hudson
Curriculum Connections	Investigate the world through our senses	Sequence garden pictures by color and size	Expand vocabulary while learning new words from the carrot diagram	Formulate "why, what, and how?" questions



Art Studio

February 2020

	Activity #1 Stick Puppets	Activity #2 Fabric Collages	Activity #3 Prepping for Annual Art Expo
Objectives	<ul style="list-style-type: none"> • Purposefully choose art tools to achieve desired outcomes • Represent an idea using visual media and materials 		
Materials	<ul style="list-style-type: none"> • Large Popsicle Sticks • People cutouts • Collage materials • Markers, pens, pencils • Glue 	<ul style="list-style-type: none"> • Fabric & ribbon scraps • Heavy paper • Scissors • Glue 	<ul style="list-style-type: none"> • Various materials
Experiences	<ul style="list-style-type: none"> • Have children choose desired cutout. • Ask them to design a puppet that looks like themselves. • Affix cutout onto popsicle stick to create stick puppet. 	<ul style="list-style-type: none"> • Cut scraps into smaller pieces, or have older children cut their own • Glue scrap pieces onto heavy paper • Allow to dry. 	<ul style="list-style-type: none"> • Twos: Puffer Ball splatter painting with acrylic • Preschool: Acrylic pour on canvas • Kindergarten Prep: Clay
Curriculum Connections	<p><i>Toward a Better World:</i> Demonstrate awareness of personal traits and characteristics</p> <p><i>Science Rocks:</i> Observe and identify physical characteristics</p>	<p><i>Language Works:</i> Develop small muscles in the fingers and hands and refine fine motor skills</p>	



Music & Movement

February 2020



	<u>Week of 2/3</u> Musical Marching Parade	<u>Week of 2/10</u> Action Songs	<u>Week of 2/17</u> Sound Exploration	<u>Week of 2/24</u> Mindful Kids Activities
Objectives	Learn to sing songs as they participate with peers and develop gross motor skills	Follow directions as they listen to the steps of each song	Compare the instruments sounds, high-low	Nurture inner peace and strength while listening to soothing music
Materials	Different musical instruments	Music and variety of color streamers	Bells, triangle, tambourine, maracas, rain stick	Mindful Kids Cards, play soft music from other cultures
Activities	Have children march, dance, clap and sing to the music being played and act as if they are part of a musical parade	Sing songs with actions such as "Head, Shoulders, Knees and Toes; "Hickory Dickory Dock, "Hokey Pokey"	Have children sit in a circle. Explore each instrument and use words like: loud/soft, slow/fast	Pick two mindful cards and follow the steps. Practice taking deep breaths in between exercises
Curriculum Connections	Well Aware: Coordinate multiple muscle movements Toward A Better World: Support peer interactions and social skill development	Language Works: Recall steps and follow two-or three-step directions	Language Works: Develop listening skills, creativity and imagination	Well Aware: Strengthen and refine our large muscle skills



Dance Class

February 2020



	Preschool	Kindergarten Prep	Kindergarten
Objectives	Everyone is placed in their recital spots in two straight lines. Work on switching lines from front to back and back to front with the larger classes.	Everyone is placed in their recital spots in two straight lines. Large group dance and class dances choreography will be completed by the end of the month.	Everyone is placed in their recital spots in two straight lines. Large group dance and class dances choreography will be completed by the end of the month.
Dance Moves	Choreography for recital dances. Watching and listening to Ms. Rachel/Ms. Dottie on how to do the dance moves.	Choreography for recital dances. Watching and listening to Ms. Rachel/Ms. Dottie on how to do the dance moves	Choreography for recital dances. Watching and listening to Ms. Rachel/Ms. Dottie on how to do the dance moves
Terminology	No new terms since working on choreography.	No new terms since working on choreography.	No new terms since working on choreography.



Sign Language

February 2020



MOTHER

The thumb of the "5" hand taps the chin several times.



FATHER

The "5" hand is held up with the thumb tapping the forehead several times.



HAPPY

The flat hand passes the chest repeatedly with an upward movement like a beating heart.



HOME

The flat "O" hand touches the fingertips to the chin and moves toward the ear.



SHOES

The two sideways "S" hands tap together several times.



COAT

Both "A" hands are held at shoulder level then come together in the front of the chest as if closing a coat.

from **SIGN with your BABY** ~ Dr. Joseph Garcia

