

STEM Lab – January 2019



Over and Under the Snow (Animal Dens)

Objectives

- Freely explore materials at a developmentally appropriate level
- Understand spatial relations and proportions

Materials

- Book: *Over and Under the Snow* by Kate Messner
- Toy Forest/Arctic Animals (squirrel, chipmunk, fox, beaver, bear (black or polar), wolves, etc)
- Wood Blocks
- Cotton Balls (pretend snow)
- Non-fiction books about Arctic animals, forest animals, animals that hibernate
- Photographs of winter animal homes/dens

Activities

- Read the book *Over and Under the Snow* by Kate Messner
- Discuss different animals that live in the forest and hibernation
- Build snowy houses/dens for the animals using wood blocks and cotton balls
- Count how many blocks/cotton balls are used
- Work on spatial relations by putting the animals under/over, inside/outside, up/down, in/out, next to/beside, around/above (children can either identify the positions or follow directions about where to put the animals)

Variations:


- If you don't have plastic animals that fit, print and laminate picture cards or attach pictures of animals to rocks, blocks, milk caps, etc
- Use a variety of different blocks, including different shapes, sizes, natural wood blocks, etc.
- Older children can do a KWL about forest animals, Arctic animals, or animals that hibernate
- Draw pictures of animal dens, work on spatial relations with their pictures (STEAM)
- Use pictures as planning tools to build

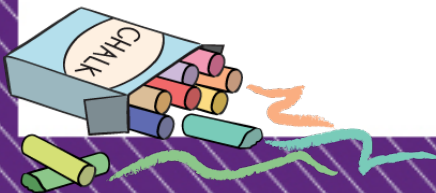
Children learn to

- Count sequentially
- Identify shapes, understand their properties, and create new shapes
- Understand and use spatial concept vocabulary in daily speech such as under/over; inside/outside; on/off; up/down; in/out; around/above
- Understand proportions (big/medium/small)
- Question when exploring materials
- Use what, why, where, and how questions appropriately and sequentially
- Demonstrate persistence in problem solving
- Become familiar with the properties of living things
- Independently use tools to research information or deepen understanding
- Understand the basic concepts of balance and weight



Art Studio – January 2019

 Bright Horizons Early Education & Preschool	<u>Weeks of 1/7 & 1/14</u> Paint & Fold Reflections	<u>Week of 1/21</u> Action Painting <i>Jackson Pollock inspired art</i>	<u>Week of 1/28</u> Paper Cut Out Stencils & Finger Paint
Objectives	<ul style="list-style-type: none"> • Explore and experiment with visual media and materials. • Use art materials and tools purposefully and creatively. 		
Materials	<ul style="list-style-type: none"> • White paper • Paint & paint brushes • Optional: pencils 	<ul style="list-style-type: none"> • White Paper • Paint – thinned with a bit of water, or you can use liquid watercolor • Toothbrushes, straws, eye droppers, & other unorthodox tools 	<ul style="list-style-type: none"> • Newsprint paper • Finger paint paper • Finger paint • Container of water
Activities	<ul style="list-style-type: none"> • Position paper horizontally and fold paper in half lengthwise, creating a “top” and “bottom”. • Encourage children to paint the bottom half of paper one solid color. Allow to dry. • Once bottom is dry, paint on top half of paper. • Once painting is complete, fold paper together, creating a “reflection” on the bottom half of paper. <p>Optional: encourage older children to draw a landscape to paint</p>	<ul style="list-style-type: none"> • Facilitate discussion with children about Jackson Pollock and his method of painting. Images can be accessed from the internet. • Offer children various tools to apply paint to paper • Allow to dry. 	<ul style="list-style-type: none"> • Cut shapes out of the newsprint paper. Shapes can be random or you can offer specific shapes or images to be cut out. • Quickly dip the newsprint cut outs into water and lay them on top of the finger paint paper – they should stick together. • Use finger paint to paint over the paper – even over the cutouts. • When finished painting, cut outs can be remove to reveal shapes. • Allow to dry
Children learn to	Math Counts: Explore mathematical concept of symmetry	Science Rocks: Experiment with familiar tools in new ways. Language Works: Strengthen and refine small muscle skills	Science Rocks: Experiment with the physical properties of materials; Experiment with the scientific concept of “adhesion”



Dance Class – January 2019



Preschool

Kindergarten Prep

Kindergarten

Objectives

Dancing in dance space and remembering own dance spots. Everyone will be placed in their spots for recital dances and will stay in these spots through the rest of the year. We will begin working on and talking about facial expressions during dancing.

Moving across the floor with proper body and feet placement. Practice straight leg movements, closing feet in first position, bringing leg up in passe and keeping foot in proper place on side of knee.

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Dance Moves

Begin the process of walking around in a circle (for smaller classes) and going back to spots. Begin the process of switching lines (back line to front, front line to back) for the larger classes.

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Terminology

Same terms, begin putting them together. Practice doing the steps together.

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Echappe – to escape
Tendu – to stretch
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Passe – to pass
Saute – to hop


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GardenWorks – January 2019

Hydroponics

 Bright Horizons <small>Early Education & Preschool</small>	Toddlers	Twos	Preschool	Kindergarten Prep
Objectives	To become familiar with the properties of living things and the relationship between living and nonliving things			
Materials	<ul style="list-style-type: none"> • 2-Liter bottle • cotton balls • heavy cotton string or twine • bean seeds • water 	<ul style="list-style-type: none"> • 2-Liter bottle • cotton balls • heavy cotton string or twine • bean seeds • water 	<ul style="list-style-type: none"> • 2-Liter bottle • cotton balls • heavy cotton string or twine • bean seeds • water 	<ul style="list-style-type: none"> • 2-Liter bottle • cotton balls • heavy cotton string or twine • bean seeds • water
Activities (See activity descriptions for full details.)	<ul style="list-style-type: none"> • <i>Activity #1:</i> Create a Hydroponic Garden • Book: <i>Growing Vegetable Soup</i> by Lois Ehlert 	<ul style="list-style-type: none"> • <i>Activity #1:</i> Create a Hydroponic Garden • <i>Activity #2:</i> Identify Parts of a Plant • Book: <i>Planting a Rainbow</i> by Lois Ehlert 	<ul style="list-style-type: none"> • <i>Activity #1:</i> Create a Hydroponic Garden • <i>Activity #2:</i> Identify Parts of a Plant • Book: <i>From Seed to Plant</i> by Gail Gibbons 	<ul style="list-style-type: none"> • <i>Activity #1:</i> Create a Hydroponic Garden • <i>Activity #2:</i> Identify Parts of a Plant • <i>Activity #3:</i> What do the Parts of the Plant do? • Book: <i>Up in the Garden and Down in the Dirt</i> by Kate Messner
Children learn to	<ul style="list-style-type: none"> • Question when exploring materials • Formulate “why, what and how?” questions 	<ul style="list-style-type: none"> • Formulate “why, what and how?” questions • Identify parts of a plant 	<ul style="list-style-type: none"> • Formulate “why, what and how?” questions • Identify parts of a plant 	<ul style="list-style-type: none"> • Formulate “why, what and how?” questions • Identify parts of a plant • Identify the function of each part of the plant





Music & Movement – January 2019



Week of 1/7
High, Middle,
Low

Week of 1/14
Song Sack

Week of 1/21
Do Re Mi Plastic
Bottles

Week of 1/28
Musical
instrument
Memory Match

Objectives

To explore the musical concept of "pitch"

To explore singing favorite songs as picked by children

Children will learn how to create a note by blowing across the top of a bottle

Develop knowledge of instruments

Materials

Instrument with multiple pitches (a recorder, horn, flute, etc.)

a small bag of note cards that have song titles on them

8 – 20oz plastic bottles filled with different amounts of water

sets of cards with pictures of musical instruments

Activities

Encourage children to move about. Play random notes on the instrument. Make sure that you are playing random notes.

- Play a high note – children stretch up high
- Play a low note – children curl up low to the ground
- Play a middle note – children cross arms at their middle

Have children sit in circle. Each child picks a song card from the bag. Sing the songs noted on the cards.

Fill each bottle with the noted amount of colored water to produce the desired note/sound:

Do - 7 oz.
Re - 9 ½ oz.
Mi - 12 ½ oz.
Fa - 14 oz.
So - 16 ½ oz.
La - 17 ½ oz.
Ti - 18 ½ oz.
Do - 19 oz.

After bottles are filled, blow across the tops of the bottles to create the note/sound.

Discuss with children the different instruments on the cards

Use the cards to play Memory.

Children learn to:

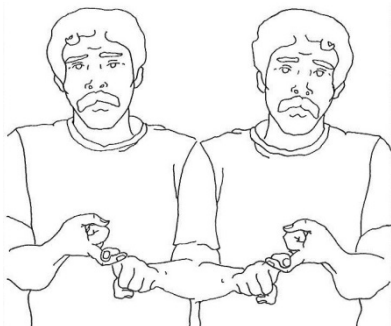
Science Rocks:
Explore properties of sound
Art Smart:
Recognize musical components

Art Smart:
Appreciate and sing songs

Science Rocks:
Understand cause and effect; explore how properties can change
Art Smart:
Experiment with sound

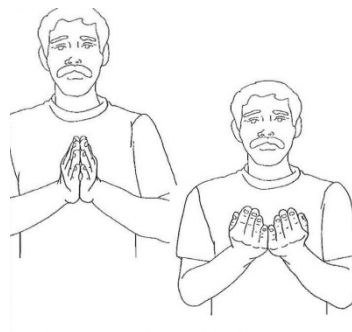
Language Works:
Identify objects by name and picture

Sign Language – January 2019



FRIEND

The index fingers lock together. Then the hands flip over and the index fingers lock the other way.



BOOK

Two flat hands are held together, and then open.



PLAY

The “Y” hands are held at the sides and pivot back and forth at the wrists



JUMP

The inverted “2” action hand rests on the palm of the base hand. The action hand springs up as if jumping.



RUN

Both “L” hands are in front of the chest with the index finger of the rear hand linking to the thumb of the forward hand. Both hands move toward the body and the forward index finger bends.



DANCE

The “5” hand is held with the palm facing up. The inverted “2” hand swings back and forth over the base hand, as if dancing.

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