

Early Learning Matters

Workshop for 4-5 year olds

Theme: Exploring our world – Science



Essential Questions:

- How can you help your child explore the world?
- How can you help your child learn about opposites?
- How can you help your child learn new vocabulary?

Objectives:

- Parents will become actively engaged in their children's learning.
- Parents will see themselves as their child's first, best teacher.

Outcomes:

- Parents are empowered as first educators of their children.
- Parents will feel comfortable exploring the world and asking questions about how things work with their children.
- Parents help their child learn new words.

Materials Needed:

Section 1 – Time with parents

- DVD – Ready to Learn, Chapter 3, Learning with Your Preschooler

Section 2 – Guided Practice with Parents and Children

Activity 1 – Magnets

- Magnet wands
- Rubber bands
- Washers
- Hair pins
- Pennies
- Paperclips
- (any objects that will and will not be attracted to a magnet)
- Printed sheets with the possible questions (laminated and placed on the tables for easy reference for parents and guardians)

Activity 2 – Sink and Float

- Several plastic containers filled with water
- Towels
- Apple
- Pennies
- Corks
- Leaves
- Marbles
- (any other objects that will sink or float)
- Margarine, yogurt, cottage cheese lids
- Copies of possible questions for parents

Activity 3 – Ramps

- Matchbox cars
- Several pieces of wood to use as ramps
- Blocks of wood to raise and lower the ramps to different heights
- Strips of carpet, corduroy or some other type of rough material
- Tape measure
- Stop watch

Section 3 – Review with Parents, Evaluation with Parents, Closing

- Evaluation Sheet

Take Home:

- Book
- Magnet wand
- Binder
- Nursery rhymes and songs

Possible New Vocabulary:		
Activity 1: Magnets <ul style="list-style-type: none">• Repel• Attract• Magnet• Metal• Non-metal	Activity 2: Sink & Float <ul style="list-style-type: none">• Heavy• Light• Sink• Float• Mass• Density	Activity 3: Ramps <ul style="list-style-type: none">• Ramp• Motion• Friction• Steep• Slope• Fast• Quick• Slow• Near• Far• Farthest, slowest, fastest (etc...)• Stop watch• Tape measure

~~~~~

## Workshops Steps & Procedure:

### Section 1 – Time with parents

- DVD – Ready to Learn, Chapter 3, Learning with Your Preschooler
- Model how to read a non-fiction book to your child
- Activity introduction
  - ✦ Discussion
  - ✦ Model the three activities (see Section 2 for details)

.....

### Section 2 – Guided Practice with Parents and Children

#### Activity 1 – Magnets

##### **MT Guidelines**

- *Receptive Language: Children enter into the exchange of information around what is seen, heard and experienced. they begin to acquire the concepts and language that contribute to learning to communicate and eventually to read.*
- *Expressive Language: Children learn when they talk out loud. Children use words to help adults and others to understand their needs, ask questions, express feelings and solve problems.*
- *Classification and Comparison: Children apply mathematical skills through counting, sorting and comparing objects. Children describe their thinking and observation skills in everyday situations.*
- *Formulation of Questions: Children will learn to ask questions about the world around them, the first step in the scientific method, based on observations, experiences and interests.*
- *Children will learn to predict answers and form hypotheses, the second step in the scientific method.*
- *Experimentation: Children will learn to conduct experiments in order to test their predictions, the third step in the scientific method.*
- *Communication of Results: Children will learn to communicate the final results, the sixth step in the scientific method.*
- *Self- Regulation: Children learn to identify and express their feelings in non-hurtful ways, recognize the impact their behavior has on others and practice self-control.*
- *A Caring Community: Children learn to feel secure as they develop relationships of trust with adults and other children in their expanding world beyond family. They begin to recognize social cues and become sensitive to others' feelings.*

### **Milestones**

- Manages emotions appropriately
- Focuses on a task for 10-15 minutes
- Shows kindness and empathy
- Answers who, what, where, when questions
- Focuses on task for 5 minutes, persisting through problems and distractions
- Aware of cause and effect
- Understands the concepts of same, different and equal

### **Procedure**

**Facilitator will set out all of the materials for this center on a table. Demonstrating how some of the items are attracted to the magnet wands and some are not. Show the parents the laminated sheets with possible questions to start the dialogue and scientific inquiry with their children.**

**Parents and children will actively explore the magnetic and non-magnetic items that are available. Facilitator will move from one center to another modeling how to play with the materials with the children and answer any questions that may arise.**

### **New Vocabulary with definition**

- Repel- (verb) to drive off, force back or keep away—"The rain coat repels water."
- Attract- (verb) to draw or pull towards oneself by special quality or action—"A magnet attracts nails."
- Magnet- (noun) a piece of metal or rock that attracts iron, steel and some other substances. Magnets are used in machines and compasses.
- Metal- (noun) a substance that is shiny and conducts heat and electricity. Most metals can be melted and can be hammered into shapes.

### **Activity 2 – Sink and Float**

#### **MT Guidelines**

- *Receptive Language: Children enter into the exchange of information around what is seen, heard and experienced. they begin to acquire the concepts and language that contribute to learning to communicate and eventually to read.*
- *Expressive Language: Children learn when they talk out loud. Children use words to help adults and others to understand their needs, ask questions, express feelings and solve problems.*
- *Classification and Comparison: Children apply mathematical skills through counting, sorting and comparing objects. Children describe their thinking and observation skills in everyday situations.*
- *Problem Solving: Children build a foundation for solving problems by formulating questions and possible solutions individually and with others based on their observations and experiences.*
- *Formulation of Questions: Children will learn to ask questions about the world around them, the first step in the scientific method, based on observations, experiences and interests.*

- *Children will learn to predict answers and form hypotheses, the second step in the scientific method.*
- *Experimentation: Children will learn to conduct experiments in order to test their predictions, the third step in the scientific method.*
- *Communication of Results: Children will learn to communicate the final results, the sixth step in the scientific method.*
- *Children begin to identify who they are as a person (such as likes, dislikes, interests, strengths) and develop competence and confidence in their own unique abilities. They grow into themselves, differentiating from their parents and others, developing and beginning to recognize their areas of strength and skill, and applying their emerging esteem alone and in groups.*
- *Self- Regulation: Children learn to identify and express their feelings in non-hurtful ways, recognize the impact their behavior has on others and practice self-control.*
- *A Caring Community: Children learn to feel secure as they develop relationships of trust with adults and other children in their expanding world beyond family. They begin to recognize social cues and become sensitive to others' feelings.*
- *Roles, Rights and Responsibilities: Young children begin to follow rules and set personal boundaries for their behavior, as well as understand why rules are created. When presented with a set of alternatives, children are able to make choices for their own lives.*

### **Milestones**

- Manages emotions appropriately
- Focuses on a task for 10-15 minutes
- Shows kindness and empathy
- Answers who, what, where, when questions
- Focuses on task for 5 minutes, persisting through problems and distractions
- Aware of cause and effect
- Understands the concepts of same, different and equal

### **Procedure**

**Demonstrate to the parents questioning of whether or not an object will sink or float. Then check to see if you are right. Demonstrate as a think out loud. I think that the apple will sink. Oh, I was wrong it floated.”**

**After having the parents experiment with what will float and what sinks introduce the plastic lids and talk about how boats should sink—they are made out of metal that is more dense than the water but they stay afloat due to how the weight is spread out. Using the lids as “boats” see how much “cargo” their boats can hold before they start to sink. Discuss why that might be.**

## ***Literacy Connection***

### **Books**

Allen, Pamela; Who Sank the Boat?

### **Songs and Nursery Rhymes**

Row, Row, Row Your Boat

Row, row, row your boat  
Gently down the stream  
Merrily, merrily, merrily, merrily  
Life is but a dream.

Jack and Jill

Jack and Jill went up the hill  
To fetch a pail of water  
Jack fell down and broke his crown  
And Jill came tumbling after.

## **Activity 3 – Ramps**

### ***MT Guidelines***

- *Receptive Language: Children enter into the exchange of information around what is seen, heard and experienced. they begin to acquire the concepts and language that contribute to learning to communicate and eventually to read.*
- *Expressive Language: Children learn when they talk out loud. Children use words to help adults and others to understand their needs, ask questions, express feelings and solve problems.*
- *Problem Solving: Children build a foundation for solving problems by formulating questions and possible solutions individually and with others based on their observations and experiences.*
- *Formulation of Questions: Children will learn to ask questions about the world around them, the first step in the scientific method, based on observations, experiences and interests.*
- *Children will learn to predict answers and form hypotheses, the second step in the scientific method.*
- *Experimentation: Children will learn to conduct experiments in order to test their predictions, the third step in the scientific method.*
- *Communication of Results: Children will learn to communicate the final results, the sixth step in the scientific method.*
- *Children begin to identify who they are as a person (such as likes, dislikes, interests, strengths) and develop competence and confidence in their own unique abilities. They grow into themselves, differentiating from their parents and others, developing and beginning to recognize their areas of strength and skill, and applying their emerging esteem alone and in groups.*

- *Children learn to identify and express their feelings in non-hurtful ways, recognize the impact their behavior has on others and practice self-control.*
- *A Caring Community: Children learn to feel secure as they develop relationships of trust with adults and other children in their expanding world beyond family. They begin to recognize social cues and become sensitive to others' feelings.*
- *Roles, Rights and Responsibilities: Young children begin to follow rules and set personal boundaries for their behavior, as well as understand why rules are created. When presented with a set of alternatives, children are able to make choices for their own lives.*

### ***Milestones***

- Manages emotions appropriately
- Focuses on a task for 10-15 minutes
- Shows kindness and empathy
- Answers who, what, where, when questions
- Focuses on task for 5 minutes, persisting through problems and distractions
- Aware of cause and effect
- Understands the concepts of same, different and equal

### ***Procedure***

**Parents and children will use the flat pieces of wood and the block of wood to build ramps at different heights. Talk about how steep one is in comparison to another. Using the cars, tape measure and/or stop watches measure how far and how fast the car goes depending on the slope of the ramp.**

**After experimenting with the slope of the ramp try putting different materials on the ramp, observe whether the texture of the materials will speed up or slow down the speed of the cars. (This is friction)**

### ***Literacy Connection***

#### **Songs and Nursery Rhymes**

The Wheels on the Bus

The Wheels on the bus  
go round and round  
Round and round  
The wheels on the bus  
go round and round  
All through the town

The driver on the bus  
Says move on back  
Move on back  
The driver on the bus

Says move on back  
All through the town

The wipers on the bus  
Go swish, swish, swish  
Swish, swish, swish  
The wipers on the bus  
Go swish, swish, swish  
All through the town

.....  
**Section 3 – Review with Parents, Evaluation with Parents, Closing**

***Follow up group discussion***

- ***What did your child enjoy?***
- ***What didn't your child enjoy?***
- ***What else could you do at home to help ....(address essential question)***
  - ***Write down all ideas that parents share***
  - ***If possible print the ideas and copy for each parent to take home when they leave***
- ***Time for parents to fill out the Parent Questionnaire about the workshop***
  
- ***Make sure parents take home items***
  
- ***Let parents know date of next workshop***