

MAINE DEPARTMENT  
OF EDUCATION

# Pre-K for ME Unit 5 Overview Shadows and Reflections



**Presented by:** The Early Learning Team





## Unit 5: Shadows and Reflections





✓ **Unit 5 Overview**

Foundational Concepts

Centers overviews and  
connection

Tips

## Goals for Unit 5 Overview

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- Learn the overall unit concepts
- Connect concepts to Read A-louds, Centers, and Small groups
- Gain tips to support instruction and flow of the unit

# Shadows and Reflections: The Big Ideas

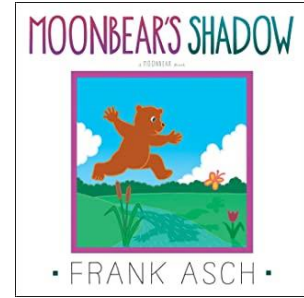
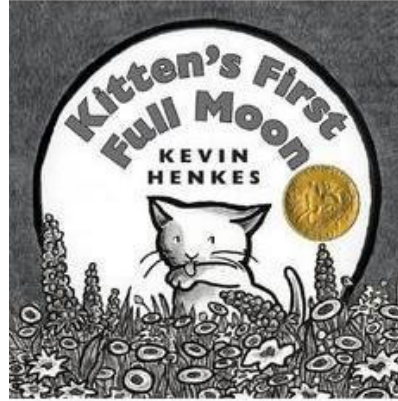
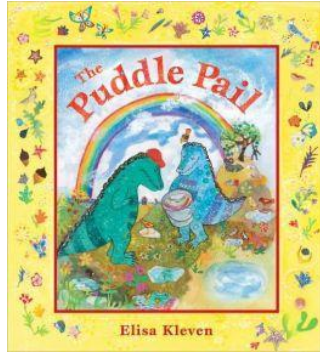
- Children will explore the properties of light and how it is beneficial to people and animals.
- Children will learn the science of shadows and reflections through experiments and exploration.



# Shadows and Reflections: Unit Concepts

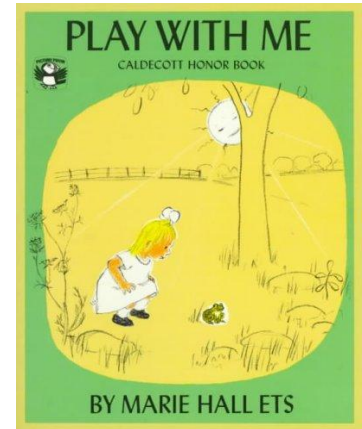
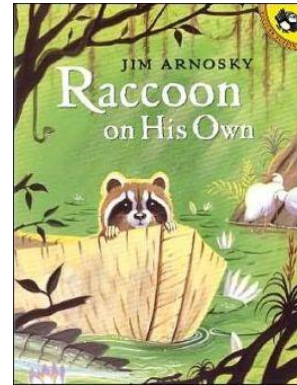
## Basic Unit Concepts:

- Light comes from natural and artificial sources.
- Light affects people, animals, and things.
- Reflections are images thrown back from a shiny surface.
- Light must be present or there is no reflection.
- Mirrors and still water reflect light well, dull surfaces do not.
- Objects vary in the amount of light they allow to pass through them. These variations are opaque, translucent, or transparent.
- Shadows are dark areas formed when light is blocked by an object.



# Core Read Aloud Books

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# Vocabulary

Vocabulary words are introduced through Core books, Let's Find Out About It activities, and Small Group activities.

New vocabulary is reinforced through Centers and SPWLN, as well as read aloud, LFOAI, and small groups. Really, all parts of the day have opportunities to reinforce and strengthen vocabulary.



# Vocabulary in Core books

Unit 5  Week 1	<b>Raccoon on His Own Read Aloud</b>	<b>Standards:</b> ELA.SL.CC.PS.1 - 3; ELA.RL.KID.PS.1 - 3 ELA.RL.CS.PS.1 - 3; ELA.RL.IKI.PS.1 - 2 ELA.RL.LTC.PS.1
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<b>Materials:</b> <ul style="list-style-type: none"><li>● <i>Raccoon on His Own</i></li></ul>	<b>Vocabulary:</b> <ul style="list-style-type: none"><li>● bank – the higher ground along the edge of a stream</li><li>● crawfish – animal that looks like a small lobster</li><li>● draped</li><li>● drifting – moving slowly on water</li><li>● merganser – fish-eating diving duck</li><li>● nudged – pushed</li><li>● paddled</li><li>● reflection</li><li>● scatter</li><li>● sturdy - strong</li><li>● swamp – land that is always wet and often partly covered with water</li></ul>
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#### **First Read:**

Children will:

- Listen to a story read aloud.
- Demonstrate increasing levels of sustained and focused engagement.
- Show a steady increase in the number of words in listening vocabulary.
- Develop understanding of main events.

Teachers will:

- Read with expression.
- Select 5-10 vocabulary words and enhance them by: pointing to the picture, gesture, tone of voice or by inserting a short definition.
- Provide comprehension asides: comment during the story about the main character's emotional state, explain an illustration or a change in scene, or indicate what various characters do or do not know.
- Model analytical thinking when appropriate – e.g. "I'm thinking...."





## Centers

# Supporting Vocabulary Development during Centers

**Painting a Woodland**

NAMING WORDS		ACTION WORDS		DESCRIBING WORDS	
meadow	fawn	paint	create	color names	colorful
pond	frog	design	include	light	bright
stream	box turtle	choose	combine	creative	unique
reflection	chipmunk				
blue jay	turtle				
alligator	raccoon				
snake	reptile				
amphibian					

**Comments / Questions / Expanded Conversation**

**RIGHT HERE:**

- **Use Parallel talk + Open ended Questions – for example:**

You included animals from the books in your design. I see a blue jay in the sky and here is the box turtle...what other animals did you include in your painting?

- **Use Self talk – for example:**

I like the light blue color of this paint that I made by mixing some white paint with the blue paint. I think I'll call it 'pond blue!' And I made a light green alligator the same way, by combining green and white paint.

- **Expand Children's Comments**

Child: I made a painting!

Teacher: You painted with several colors. No one else has painted a purple raccoon. That makes your colorful painting unique.

# Block Center in Unit 5

- Children will use mylar and mirrors in the block center to explore reflections.
- Plain walls or poster board will be used to explore shadows, using flashlights, other sources of light and various blocks and objects.
- Children will use unit blocks and “Beautiful stuff” to create museums.



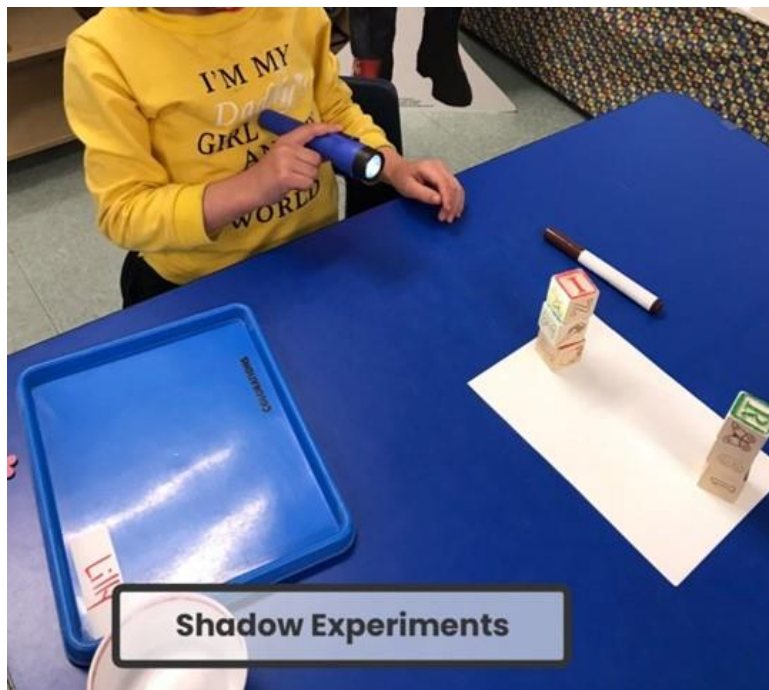
# Mylar and Blocks/Mirrors and Blocks



Tip: If you don't have mylar available, wrap blocks in aluminum foil or shiny wrapping paper.



# Experimenting with Shadows





# Museum Creation





# Dramatization in Unit 5

- Children will create a woodland and/or swamp area and pretend to be different animals living in that area.
- Children will explore moving and dancing shadows.
- Children will pretend to go fishing.



# Woodland and Swamp areas



# Dancing Shadows



Outdoor example of  
Dancing Shadows.

# Going Fishing



# Art Studio in Unit 5

- Children will create woodland and swamp paintings, shiny paintings, and paintings with outlines.
- Children will create black, white, and gray illustrations.
- Children will create reflective and stained-glass collages.





# Paintings and Illustrations



Week 1: Woodland/swamp paintings



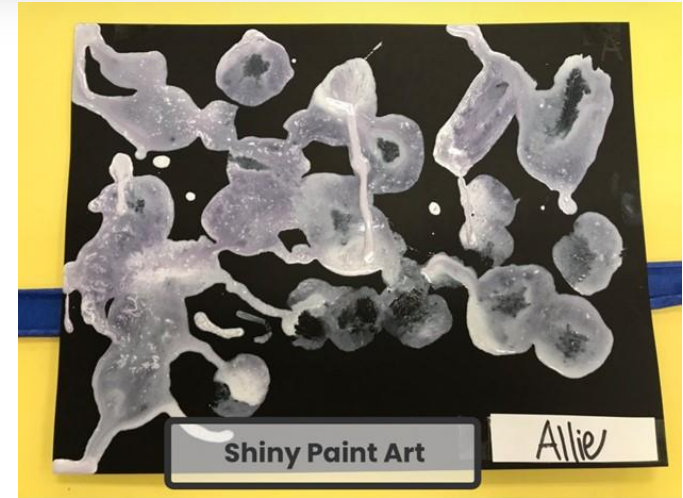
Week 2: Black, white and gray illustrations



# Shiny Paintings



Tip: If you don't have metallic or shiny paint, painting on aluminum foil makes any painting a shiny painting!



Creating shiny paintings on aluminum foil, with metallic paint and with shiny paint made using cornstarch.

# Collages



# Library in Unit 5

- Children will research woodland, swamp and nocturnal animals and puppets.
- Children will put on a shadow puppet show.



# Research

Using the resources provided, children research and document their learning.

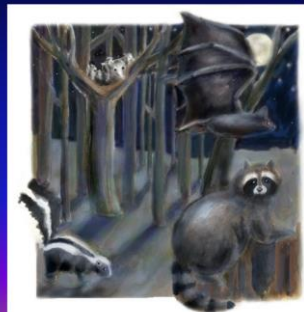
## Woodland Animals in Maine



## Swamps in Maine



Who is awake at night?



# Research



Tip: Provide students puppets to give them a real-world example and hand-on experiences.



# Shadow Puppet Theater

Using shadow puppets, children retell and act out the story *Play With Me*.





# Discovery in Unit 5

- Children will explore reflections in water.
  - Use a variety of objects throughout the unit.



# Discovery

Children explore reflections in water.



Tip: Take it outside!  
Look for reflections in puddles!



# Manipulatives in Unit 5

- Children complete woodland animal puzzles.
- Children match shadows to the animal or object creating it.
- Children sort reflective and non-reflective items and create collections.



# Manipulatives

Children will complete puzzles, sort reflective and non-reflective items, match shadows, and make collections.





# Writing in Unit 5

- Children will search for and record reflections and shadows in the classroom.
- Children will trace and label shadows.
- Children will write about collections.



# Writing

Children draw and record shadows and reflections.





# Writing

Children will label and write about collections.





## Let's Find Out About It: Clear and Blurry Reflections

Standards:  
S.LS.PS.6  
ELA.LS.VAU.PS.1-1a



### Materials:

- *Play with Me*
- *Raccoon On His Own*
- Mirrors
- Clear and blurry reflections resource

### Vocabulary:

- reflection
- image
- mirror
- still
- smooth
- blurry
- clear

**Preparation:** Gather materials.

### Let's Find Out About It:

"The raccoon in *Raccoon On His Own* and the girl in *Play With Me* saw their **reflections**. What do you notice?"

*Show illustrations. Children respond.*

"They saw their **reflections** in water. Here are other images of reflections. What do you notice?"

*Show images. Children respond.*

"The water in this image is **still**-- not moving. The water in this image is moving. What do you notice?"

*Children respond.*

"You used a **mirror** to see your **reflection** when you made self portraits. How is this **reflection** in the **mirror** similar or different from a reflection in the water?"

*Children respond.*

"**Reflections** on a **smooth** surface, like **still** water and a **mirror**, are **clear**. A **reflection** on a **bumpy** or moving surface is **blurry**."

# Vocabulary in Let's Find Out About It





Maine Lighthouse Museum



Owls Head Transportation Museum



# Let's Find Out About It in Unit 5

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# Vocabulary in Small Groups



## Small Groups: Reflective/Non-Reflective Materials

Support: Medium

**Standards:**  
M.G.PS.1  
M.MD.PS.1-2  
M.MD.PS.8-9



### Materials:

- *Raccoon On His Own*
- *Play With Me*
- mirrors
- flashlights
- reflective and non-reflective materials
- chart paper
- Table tents made from dark construction paper

### Vocabulary:

- (non-) reflective
- shiny
- dull
- sort
- surface

**Preparation:** Set up materials. Create the “Reflective” and “Non-Reflective” recording chart (refer to image) or use two trays labeled “reflective” and non-reflective” to sort objects.

### Procedure:

Show illustrations from *Play With Me* and *Raccoon On His Own*. Review LFOAI Reflections. Show materials and recording chart. Sort materials into ‘reflective’ and ‘non-reflective’ groups. Encourage children to explain how they sorted, i.e., “Tin foil is a reflective because it has a shiny surface,” “the construction paper is non-reflective because it has a dull surface,” etc.

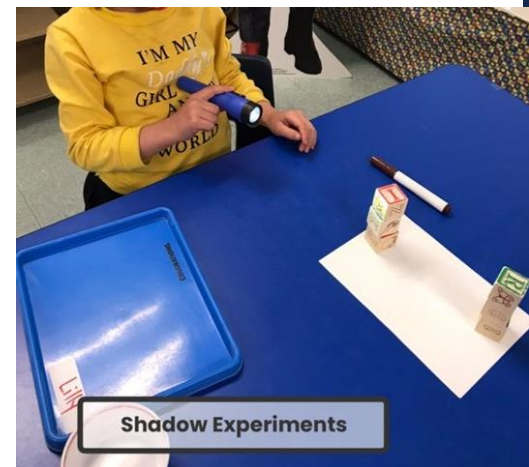







# Small Groups in Unit 5

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Shadow Experiments





## Unit 5 Tips

- Have plenty of flashlights and various forms of light sources.
- If mylar or mirrors are not available for activities, use aluminum foil.
- Take activities outside! Reflections and shadows can easily be explored outside!



Helpful Links

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[Pre-K for ME Unit 5](#)

[Pre-K for ME](#)

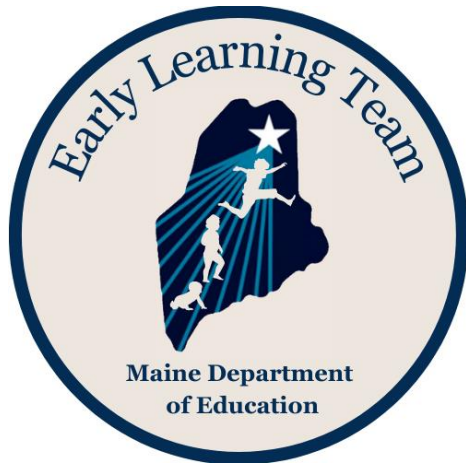
[DOE Early Learning](#)



# Questions regarding Pre-K for ME:

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