Planned Read-Aloud

Book: <u>Day Light, Night Light</u> by Franklyn M. Branley

Note:

This nonfiction book illustrates many concepts about light. Preview the book and identify sections that will be of greatest interest to your students, based on their recent explorations of light/dark, reflections, and shadows. Some concepts in the book (such as the solar system) are too abstract for preschoolers and can be streamlined or skipped. Remember, nonfiction books do not need to be read verbatim; it can also be valuable to just use the illustrations to explain concepts or spur a discussion with children.

Props (to illustrate concepts or word meanings, during or after reading):

Mirror to demonstrate reflections.

Activate Prior Knowledge (when introducing book):

- Remind children about the activities they did in the past week with their shadows, etc. Tell them that in this book, we will learn even more about light.
- "What things give us light?" Ask children for their ideas, and write or sketch them on chart paper. [Or, if you had this discussion during Circle Time/Opening Meeting, review it.] "In this book, you might learn about other things that make light. Be sure to notice them, and we can add them to the chart later."

Questions/Comments (to engage children during reading, re-reading or picture walk):

- (p. 5) Invite children to find shadows on this page i.e., the dog/cat.
- Encourage children to notice different light sources on different pages – fireflies, birthday candles, campfire, etc. Make comments about whether the colors are *bright* or *dark* on different pages.
- (p. 17) Illustrate the concept of reflecting/reflection, using the mirror.
- (p. 24) Ask a child to turn the light off and on once. Notice how fast it goes on.
- (p. 29) "Where else would it be really dark?"

Vocabulary (to highlight during reading or in follow-up discussions):

Flame, source, reflected, fireflies, astronauts, adjust, pupils, cellar

Discussion (after reading or during child retelling or extension activities):

- Revisit the "Light" chart and add new ideas from the book: e.g., candle flame, street light, car headlight, lamp, stars, fireflies, flashlight, campfire. On a subsequent day, do a picture-walk (rather than full re-reading) and ask children to find as many kinds of lights as they can.
- On the last page, ask children to look closely at the picture [cat in the sun]. "Where is the light coming from in this picture? How do you know?"

Extensions (building on concepts from this book through other classroom experiences):

Try the experiment on page 26: can you get rid of all light, so the classroom is completely dark?

Create a "cave" in the Block or Dramatic Play Area – hanging a sheet or blanket to create a space that is quite dark. Put a flashlight and a few small objects inside. Encourage children to turn the flashlight on and then off to see if they can still see the objects.

Reminders: Read bo

Read books aloud in small groups whenever possible.

Review this guide in advance, but don't refer to it <u>during</u> the read-aloud. If you need a reminder about which comments/questions you will use in which part of the book, use sticky notes.

Planned Read-Aloud

Book: Louie by Ezra Jack Keats

NOTES:

This book connects to some concepts in the "Light & Shadow" theme (such as shadow puppets), and can also be used in conjunction with an Ezra Jack Keats author study. Children may note similarities between Louie's neighborhood and that of Peter or other Keats characters.

Props (to illustrate concepts or word meanings, during or after reading):

Puppet and flashlight (especially if children have been using a shadow puppet theater). If doing an author study, have poster or other Ezra Jack Keats books accessible. *Suggestion for re-reading:* have word cards saying Louie and Gussie (with pictures); whenever that character appears, ask children to hold up their card.

Activate Prior Knowledge (when introducing book):

- Ask children what they see on the cover of the book.
 Point out the boy and his shadow. "The title of this book is *Louie*, so I'm going to guess that this boy is named Louie!"
- Show the puppet, and invite children to tell you what happens in a puppet show. Explain (if needed) that the puppet may look like she is talking, but it's really the person holding the puppet who talks. If children have been using a shadow puppet theater, refer to what they have been doing there.
- If doing author study, point out author study poster or other books by Ezra Jack Keats. Invite children to recall those books and notice or predict any similarities to Louie.

Questions/Comments (to engage children during reading, re-reading or picture walk):

- When Roberto says that he "never heard a word out of" Louie, explain, "that means Louie doesn't talk a lot." Later, ask children why they think Louie decided to talk to the puppet Gussie.
- Encourage children to notice the shadows seen in the illustrations throughout the book.
- "How do you think Louie is feeling when he says goodbye to Gussie?"
- "What do you think Louie will find at the end of the green string?"

Vocabulary (to highlight during reading or in follow-up discussions):

Puppet, shadow, curtain, stage, show, bow, dream

Discussion (after reading or during child retelling or extension activities):

Revisit the pages that show Louie's dream and discuss why Louie might have had a bad dream that night. "Have you ever had a funny dream or a bad dream?"

"How do you think Louie feels when he finds Gussie at the end of the string? Why did the other children leave the puppet for him?"

"Why do you think Louie likes Gussie so much? Do you have a blanket or special toy that you love like that?" (Refer back to *Corduroy* or other books that depict lovies, if appropriate.)

"If you made a puppet show, what would it be about?"

Extensions (building on concepts from this book through other classroom experiences):

Transitions – Use a puppet to facilitate transitions; e.g., the puppet can dismiss children by name or according to clues (the colors they are wearing, sounds in their names, etc).

Library – "Puppet Reading." Encourage children to involve puppets while reading books in the library. They can read to the puppet, or make the puppet read to them or other children.

Planned Read-Aloud

Book: The Very Lonely Firefly by Eric Carle

NOTES: This book is a great tie-in to both the "Light & Shadow" and "Insects & Spiders" curriculum themes. It

can also be used in conjunction with an Eric Carle author study, if desired.

Props (to illustrate concepts or word meanings, during or after reading):

If doing an author study, have poster or other Eric Carle books accessible to make connections/comparisons.

Activate Prior Knowledge (when introducing book):

- Show children the cover and tell them the title. Ask them if they have ever seen a firefly/ lightening bug. When do they see them? What do they know about them? Ask if they have ever tried to catch a firefly.
- Reread the title and ask children why they think the firefly might be very lonely. Have they ever felt lonely before? When? Why? What made them feel better?

Questions/Comments (to engage children during reading, re-reading or picture walk):

- Ask children to predict what is making the noise in the book. Why do they think this?
 Once they find out, ask them why the dog was barking and why the cat was meowing.
- On each page, invite children to tell you what light source the firefly is flying towards. Why are the people in the story outside with a candle, flashlight, and a lantern?
- How do they think the firefly felt when he found the other fireflies?

Vocabulary (to highlight during reading or in follow-up discussions):

Firefly, lonely, flashing, headlights, lantern

Discussion (after reading or during child retelling or extension activities):

Ask children why they think the firefly was lonely. Why was he flying towards other lights? What was he looking for? Did he find what he was looking for? How did he feel when he found the other fireflies?

Revisit the "Light" concept map (that you created with children as part of Circle Time or the *Day Light, Night Light* read-aloud). Are there any more types of light you could add to this map now?

Extensions (building on concepts from this book through other classroom experiences):

Provide props from the story for active role playing: e.g., lightbulb (picture or fake version), flashlights, lanterns, picture of fireworks or streamers to make own fireworks, cat, dog, owl (or costumes of these animals), etc.

Encourage children to notice different things that give off light, either at school or at home (e.g., fireflies, lights on the ceiling, lamps, the sun, flashlights, the television, etc.) Suggest to families that they talk to their children about this at home and encourage their curiosity.

Reminders: Read books aloud in small groups whenever possible.

Always <u>read</u> the book's title and author, but only review the <u>concepts</u> of author, illustrator, etc. ("what does the author do?") occasionally and until it's evident that children understand them.

ACTIVITY: Measuring Shadows

OVERVIEW:

Children will observe the shadows of various objects and measure them using inch cubes. This activity allows children to deepen their understanding of light and shadow, while also building measurement skills through an experience with "non-standard measurement."

OBJECTIVES:

- School Readiness Goal (12) Number/counting GOLD 20a (counts) School Readiness Goal (16) Measurement GOLD 22 (compares/measures) School Readiness Goal (17) Inquiry GOLD 24 (scientific inquiry) WSS III.B.1 (number/quantity) ELS 1 (functional counting) ELS 3 (measurement)
- WSS III.E.2 (measuring) ELS 4 (observation/reporting)
- WSS IV.A.1 (asks questions/uses senses)

MATERIALS:

- A light source that can be easily directed e.g., a desk lamp, spotlight, or large flashlight (preferably stationary, otherwise someone will need to hold and aim it throughout the activity!) Option: multiple flashlights so children can make the shadows themselves
- Several objects of different sizes that can "stand up" on their own e.g., tall block, bottle
- Moonbear's Shadow by Frank Asch
- Inch cubes (such as unifix)
- Variation: large piece of butcher paper; crayons or pencils.

Procedure:

SET-UP: Practice this activity in advance to ensure the lighting conditions are optimal. To create visible shadows, it's important not to have a lot of other light nearby - so you'll want to conduct this activity in a darker area of the room, if possible (away from windows, and without a lot of overhead light). Beginning:

- 1. Remind children of the part in *Moonbear's Shadow* where the shovel's shadow gets longer throughout the day. (Also make a connection to any other recent conversations/explorations related to this concept – for example, measuring shadows at different times of day outside.) Explain that "today we will make some shadows, and figure out how long they are. Maybe we can even make them get longer or shorter!"
- 2. Demonstrate using one of your objects. For example, place a rectangular block standing vertically on the table, and shine the lamp/flashlight on it to create a shadow. Move the block or the light source and have children notice how the shadow changes. (You could give the flashlight to a child across the table - and notice how the shadow "switches sides"!) Encourage children to describe what they observe.
 - Variation: If you have been talking about Groundhog Day, you could make a connection here for example, use a stuffed animal as your demonstration item, or pretend that the block is the groundhog coming out of its hole to see its shadow.
- 3. Introduce the inch cubes. "Did you know that we can use these cubes to measure the shadow?! That means they can help us figure out how long it is! How do you think we can do that?"

- 4. Set up additional items on the table to cast shadows (or invite children to help you do so). These should be arranged so that each child can easily reach at least one shadow. Distribute inch cubes where children can reach them, and encourage children to get started: "Let's see what we can find out about these shadows!"
 - Variation: If you do not have a stationary light source, it may be challenging to hold the light in

place long enough for children to explore the shadows! In that case you could put down a big piece of butcher paper and have children trace the shadows, then measure the tracings.

- 5. Encourage and model using the inch cubes to measure the shadows (by laying the cubes in a straight line along the length of a shadow, then counting the number of cubes). Watch how children use the cubes, and what they seem to be most interested in, and provide individualized support.
 - · Individualization (to support School Readiness Goal (12) Number/Counting)
 - i. Tier 1—For children with limited counting ability, try to make the task more manageable: for example, create a smaller shadow (so there won't be as many cubes to count!) or allow that child to simply connect the cubes until she reaches the right length, then have a partner do the counting. If you assist this child in counting, use self-talk as you model the process, and focus particularly on the 1-1 correspondence (touching one cube as you say one number).
 - ii. Tier 2—For children who can use the basic counting process, support them to count accurately and consistently (for example, noticing when they skip an item or a counting word). Support their understanding of cardinality (i.e., that the last number you say when counting is the total quantity): "You counted 8. So, the bottle's shadow is 8 cubes long!" Encourage these children to compare quantities visually: "Which shadow is longer, the block or the bottle? How could we find out?"
 - iii. Tier 3—For children who count accurately, give them an extra challenge. You could create an even longer shadow for them to measure; encourage them to write numerals to record the different lengths; or talk with them about comparisons and predictions. "You found out that the truck's shadow was 6 cubes... which shadow do you want to measure next? Do you think that the glue stick's shadow will be longer or shorter? How many cubes long do you think it will be?"
- 6. If children are most interested in the shadows themselves, encourage their curiosity and talk about what you/they are observing. Use language related to size (longer, shorter) and if applicable, refer back to the earlier "Size Hunt" activity and make connections to what children discovered there.
 - Extension: Allow children to manipulate the light or move the objects and see what changes result to the shadows. Make comments to extend their thinking: "What do you think will happen if we move the light further away? What about higher up?"

End:

- 7. As you conclude the activity, summarize what children did or discovered. "We learned lots of things about shadows today! Marquis, you made the bottle's shadow very big. Tina and Ashley worked together to make a line of cubes across the whole table."
- 8. Make materials available in an interest area during choice time so that children can continue exploring.

YOU MIGHT DOCUMENT:

Do children attempt use the inch cubes as a measuring tool? Do they use any comparative language (longer, shorter, etc.)? Document children's counting skills and sense of number: e.g., whether they use 1-1 correspondence, count accurately to 10 or higher, or understand cardinality. For children exploring changes in the shadows, note how children predict, observe, and/or discuss cause and effect.

ACTIVITY: Letters Big & Small

OVERVIEW:

Children will experience letters in several different ways: by walking on a large masking-tape letter on the floor, and by trying to recreate letters themselves using string, yarn or pipe cleaners.

OBJECTIVES:

School Readiness Goal (10) Letters
 School Readiness Goal (20) Physical
 WSS II.C.3 (knowledge about letters)
 WSS VII.A.1 (moves with balance and control)
 WSS VII.B.2 (eye-hand coordination)
 ELS 9 (alphabetic awareness)
 GOLD 4 (traveling skills)
 GOLD 7a (uses fingers/hands)
 GOLD 16a (identifies letters)

MATERIALS:

- Masking tape
- Alphabet cards
- Assorted pieces of yarn (approx 4-6 inches) and/or pipe cleaners

PROCEDURE:

Note: Do this activity near a floor area where you can create large letters. Test the masking-tape in advance; if it sticks or creates marks on the floor, you can also do this activity on the carpet.

Beginning:

- 1. Spread out alphabet cards on the table and ask children what they see.
- 2. Explain, "Today we are going to make letters but not with markers or crayons!" Show children the yarn or pipe cleaners. Ask for their ideas about how to make letters with these materials. Model the process: "I want to make a T, like on this card. Hmmm... It has two straight lines, one going down and one going across. How could I make this same letter with yarn? I guess I'll need two pieces..."
- 3. "While you make small letters on the table, I will make big letters on the floor! You will each have a turn to help me."

Middle:

- 4. Help children get started making letters with the pipe cleaners or yarn. If needed, encourage them to take a letter-card and try making that letter.
 - <u>Individualization</u> (to support Dual Language Learners): Check in briefly with each DLL to ensure s/he understands the activity. Repeat or model the instructions individually as needed.
- 5. Invite individual children or pairs to join you on the rug to make a large version of their letter. Ask them to help guide you: "I've made the long line...What else is part of the P?" Next encourage children to "walk the letter" (i.e., walk along the masking tape). You can let other children from the table try too; or, if they are fully engaged with the yarn, have them wait for their own turn.
- 6. Give each child a turn creating and walking a large letter. Periodically return your attention to the table, offering assistance and encouragement as needed.
 - <u>Individualization</u> (to support School Readiness Goal (10) Letters):
 - i. Tier 1 For children who do not yet identify letters, ensure they get a letter-card that will be meaningful (such as their own initial or a friend's). Name the letter yourself and use the name repeatedly as you encourage them to work on this task. "You have a K, like in your name, Khalil. What part of the K will you make first? The K has a long straight line and two shorter lines..."
 - ii. Tier 2 For children who can identify and create at least a few letters, encourage them to apply that knowledge to assisting a peer or helping make the big letters on the floor. Also

- reinforce children's understanding by helping them to notice features of different letters and similarities and differences between them.
- iii. Tier 3 For children who need an additional challenge, suggest they make the lower-case versions of any upper-case letters they have created. You could also encourage them to find a word in the environment (for example, on a book, label or display) and then recreate it.

End:

- 7. Give children a 2-minute warning. If any children did not have a chance to make a large letter with you, tell them when they will have this opportunity (e.g. during center time).
- 8. Place letter cards and yarn in the Toys & Games area for continued exploration if children want.

You MIGHT DOCUMENT:

Do children easily identify letters, and/or describe their components (lines, curves, etc.)? How do children move along the masking-tape letter?

ACTIVITY: Corduroy Retelling Extension

OVERVIEW:

In this extension activity to *Corduroy*, children will have the opportunity to draw or write about what else might happen to the characters. This helps develop skills in story retelling and emergent writing.

OBJECTIVES:

- School Readiness Goal (8) Books/stories
 School Readiness Goal (11) Print/writing
- GOLD 18c (retells stories)
- GOLD 19ab (writes name; writes to convey meaning)
- WSS II.C.3/4 (comprehends/responds)
- WSS II.D.1 (represents ideas/stories)
- WSS II.D.2 (uses shapes/symbols to write)
- ELS 7 (story retelling)
- ELS 10 (composing, production)

MATERIALS:

- Blank paper
- Crayons, markers, and/or pencils, both "chubby" and regular, in a variety of colors
- Corduroy by Don Freeman (Spanish version too, if available)

PROCEDURE:

Beginning:

- 1. Show the book *Corduroy* and ask children what they remember about it. If needed, show a few pages/pictures and ask children to tell you what is happening (e.g., when Lisa first sees Corduroy; when Corduroy tries to pull his button off the mattress; when Lisa comes back to buy Corduroy).
- 2. Show the last page of the book: "The story ends here we don't know what happens *after* Lisa brings Corduroy home. What do you think will happen *next*? What will Lisa and Corduroy do together?" Invite different children to share their ideas before they begin to work. "Today you will have a chance to draw and write *another* story about Lisa and Corduroy."

Middle:

- 3. Distribute materials and ask each child to create a story about what Lisa and Corduroy will do together. "You can draw a picture and write about it, so other people can read it later."
- 4. As children are working, circulate and provide individual support. Ask, "Tell me about your story." Make comments about their work: "It looks like you have drawn a sun. I guess Lisa and Corduroy are going outside together!" Also use open-ended questions or "wonderings" that invite children to explain/expand: "I wonder how Corduroy is feeling while he eats that ice cream cone?"
 - <u>Individualization</u> (to support Dual Language Learners): Refer to the pictures in the book to reinforce relevant vocabulary. "Look, [pointing to picture of button] Corduroy has a button. You have a button on your shirt too [point to child's button]."
- 5. If children are "writing," you may see scribbles, lines, letter-like forms or invented spelling. Validate all attempts; ask each child to read you what s/he wrote.
 - <u>Individualization</u> (to support School Readiness Goal (11) Print/Writing)
 - i. Tier 1 For children who do not attempt to write, and only draw pictures, ask them what words *you* should write about their picture and take that dictation. When you've finished writing the child's words, read them back to her/him, pointing to each word as you read it. This will show the child that there is a message connected to the writing.
 - ii. Tier 2 For children who are attempting to write, ask them what their words say. Write their dictation on the paper and encourage them to put their name on their paper. Provide them with their name tag to refer to as they work.
 - iii. Tier 3 For children with more developed writing skills or letter-sound correspondence, encourage them to write their own words. "Corduroy and Lisa are playing outside? I wonder how you could write the words *playing outside*? What sound do you hear at the beginning of

p-p-playing?"

End:

- 6. Give children a 2-minute warning before it is time to clean up. Remind children to sign their names so others will know who created each story.
- 7. If some children haven't written or dictated yet, tell them you will remind them at center time (later or tomorrow) and they can finish then.

YOU MIGHT DOCUMENT:

What do children remember about the story? Do they simply describe what they see in the pictures – or do they expand to talk about other events? Do children make attempts to label their pictures or show interest in dictating words to you? Note what type of writing each child uses (e.g., scribbles, letter like forms, invented spelling, etc.)

ACTIVITY: Transparent or Opaque?

OVERVIEW:

Students will explore the way light shines through or is blocked by different classroom objects. They will learn that when light can pass through an object, that object is *transparent*; when light cannot pass through an object, it is *opaque* and will cast a shadow. An object that lets only some light past through is *translucent*.

OBJECTIVES:

- School Readiness Goal (6) Speaking
- School Readiness Goal (15) Classification
- School Readiness Goal (17) Inquiry
- WSS II.B.2 (vocabulary/language)
- WSS III.C.1 (sorts objects)
- WSS IV.A.1 (asks questions/uses senses)
- GOLD 9a (vocabulary)
- GOLD 13 (classification)
- GOLD 24 (scientific inquiry)
- ELS 2 (classification)
- ELS 4 (prediction)
- ELS 7 (speaking)

MATERIALS:

- Flashlights (1 per child or 1 per pair if necessary)
- Transparent, opaque, & translucent items for children to explore. Some suggestions:

<u>Transparent</u>: plastic wrap, clear plastic container lids, glass cup, vase, bubble wrap packing material

<u>Opaque</u>: unit blocks or wood, felt, tin foil, cardboard, construction paper, balls <u>Translucent</u>: almost clear plastic lids, wax paper, tissue paper, paper towel

Extension: chart labeled Transparent/ Opaque (w/ picture labels) to record outcomes

PROCEDURE:

Beginning:

- 1. Remind students that light travels in a straight path and when it can't shine through something, it makes a shadow. "A few days ago, what happened when we shined the flashlight on you to draw your silhouette?...The light couldn't go through your head so it made a shadow." Ask, "Do you think that light can shine through my hand?" Take predictions and demonstrate. "Does the light come out on the other side of my hand?....No, my hand is *opaque*...The light cannot shine through my hand."
- 2. Tell the children that sometimes light can shine through an object and you can see it on the other side. Put three items on the table (2 opaque & 1 transparent). Ask students if they think light could shine through any of these items. Test out the predictions with the children's help.
- 3. Tell the students that you and their families brought some things for them to experiment with and you were wondering if they could figure out which things are *transparent* (and the light can shine through them), and which things are *opaque* (and block the light from shining through).

Middle:

- 4. Distribute flashlights and materials; either set out materials where children can reach them, or give each student a basket with assorted items. Circulate among the group to assist and facilitate. If you have any breakable items, or items that you do not have multiples of, assist children to ensure all have a turn experimenting (safely) with them.
- 5. If possible, get a prediction from each child. "What is your prediction? Do you think the light will pass through the wax paper? Why do you think that?" Be sure to check back in and discuss whether the outcome matched their prediction.

- 6. Try to use the new vocabulary often—*transparent*, *opaque*—as the repetition and related hands-on activity will help children learn these unusual words. Also help children to observe that some items let only some light pass through it and these items are *translucent*.
 - <u>Individualization</u> (to support School Readiness Goal (6) Speaking)
 - I. Tier 1 For children who don't participate in the discussion and/or use very short phrases, provide scaffolding by simplifying your own language or using repetitive sentence structure. "See my hand? Can you see the light?" Repeat what children say and extend it: "Look? You can see the light shine through the cup? The cup is transparent."
 - II. Tier 2 For children who are attentive and responding during the activity but are off topic, ask open-ended questions to provide children the opportunities to elaborate and share details: "Do you think this block is transparent or opaque? Why? [Record response on the chart]. Ok, try to shine the flashlight through. What happened? You can't see the light shining through to the other side? That block is opaque. The light didn't shine through it. What will you try next?"
 - III. Tier 3 For children who are active conversationalists and use complex language, engage them in authentic discussions and encourage them to converse with their peers. "The windows in your house are transparent? How do you know? I wonder if anyone else has transparent windows in their house. What else has windows? Why are windows on so many things? Why are they important?"
- 7. Extension Complete the Transparent v. Opaque chart as you go. Once a child has tested a particular item, ask them if you should add it to the chart and record its name (with quick sketch of item, if possible) in the appropriate column. For children who are developmentally ready, you can reinforce concepts of print, such as the fact that you are writing from left to right.

End:

- 8. Give a 5-minute clean-up warning.
- 9. Have children put all the opaque items in a pile first, then transparent, then translucent (reminding them what each word means).

WHAT TO DOCUMENT:

Note whether children make predictions, what they predict and what they observe. Do children notice how the light shines through or is blocked by different objects? Are any children starting to use the new vocabulary, or using other descriptive words to talk about the characteristics of the items they are exploring?