



Read to Be Ready plans for: **The Energy We See: A Look at Light** 1st Grade

ELA Standards:

- 1.FL.PC.1 Demonstrate understanding of the organization and basic features of print. a) Follow words from left to right, top to bottom, and page-by-page. b) Recognize that spoken words are represented in written language by specific sequences of letters. c) Understand that words are separated by spaces in print; demonstrate one-to-one correspondence between voice and print.
- 1.FL.PA.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes) a) Distinguish long from short vowel sounds in spoken single-syllable words.
- 1.FL.PWR.3 Know and apply grade-level phonics and word analysis skills when decoding isolated words and in connected text. b) Decode regularly spelled one syllable words.
- 1.FL.WC.4 Know and apply grade-level phonics and word analysis skills when encoding words; write legibly. a) Use conventional spelling for one-syllable words with common consonant spelling patterns, including consonant digraphs, double letters, and initial and final consonant blends.
- 1.FL.SC.6 Demonstrate command of the conventions of standard English grammar and usage when speaking and conventions of standard English grammar and usage, including capitalization and punctuation, when writing. k) End sentences with correct punctuation.
- 1.FL.VA.7b With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. iv) Distinguish shades of meaning among words by defining or choosing them or by acting out the meanings.
- 1.FL.VA.7c Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships.
- 1.RI.KID.1 Ask and answer questions about key details in a text.
- 1.RI.KID.3 Using graphic organizers or including written details and illustrations when developmentally appropriate, describe the connections between two individuals, events, ideas, or pieces of information in a text.
- 1.RI.CS.4 Determine the meaning of words and phrases in a text relevant to a grade 1 topic or subject area.
- 1.RI.CS.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.
- 1.RI.IKI.7 Either orally or in writing when appropriate, use the illustrations and words in a text to describe its key ideas.
- 1.SL.CC.1 Participate with varied peers and adults in collaborative conversations in small or large groups about appropriate 1st grade topics and texts.
- 1.SL.CC.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
- 1.W.TTP.2 With prompting and support, write informative/explanatory texts, naming a topic, supplying some facts about the topic, and providing some sense of closure.
- 1.W.PDW.4 With guidance and support, produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- 1.W.PDW.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from others, and add details to strengthen writing as needed.
- 1.W.RW.10 With guidance and support from adults, engage routinely in writing activities to promote writing fluency and build writing stamina.

Science:

1.PS4: Waves and Their Application in Technologies for Information Transfer

- 1) Use a model to describe how light is required to make objects visible. Summarize how illumination could be from an external light source or by an object giving off its own light.
- 2) Determine the effect of placing objects made with different materials (transparent, translucent, opaque, and reflective) in the path of a beam of light.

Comprehension skill: realism and fantasy **Phonics:** Introduce long i: ie, ough. **Phonemic Awareness:** substitute initial phonemes

Grammar/Writing: adjectives for what kind **Unit Focus:** light sources and their effect

Culminating Task: Students will respond in writing about someone who believes that light is not necessary for life on Earth.

	Read Aloud/Shared Reading	Vocabulary Focus	Discussion Questions	Written Response	Resources/Small group instruction ideas
M O N D A Y	<p>DE Video: What is Light? 9:59 https://tinyurl.com/ybmf47h7</p> <p>This video is used as an introduction to the topic of Light.</p> <p>*PAUSE the video when a question appears on the screen for discussion.</p>	<ul style="list-style-type: none"> • Artificial • natural • Electricity • Energy • Reflect • Wave • Opaque • Transparent • translucent • shadow • refract 	<p>Quiz answers at end of video:</p> <ol style="list-style-type: none"> 1. eyes 2. sun 3. energy 4. straight 5. food <p>What have we learned about light? (Make a class chart with facts learned from the video)</p> <p>What questions do we still have about light? (add to chart)</p>	<p>Draw and label sources of light.</p>	<p>**Supplies needed this week: Flashlight(s) Clear cellophane</p>
T U E S D A Y	<p>1st Read of <i>The Energy We See: A Look at Light</i></p> <p>Today read only pages 1-13.</p> <p>Project pages of this book on large screen so that the whole class can have eyes on the text and on the</p>	<p>Today's explicit vocabulary instruction:</p> <ul style="list-style-type: none"> • Artificial • natural • Electricity • Energy • Reflect • Wave <p>(words taken from glossary of</p>	<p><i>How does light travel?</i> (straight line until it hits something and then it bounces)</p> <p><i>How fast can light travel?</i></p> <p><i>What do we call it when the light bounces off something and then we can see the object?</i> (reflection)</p>	<p>Light bounces off an object and reflects back to our eyes. Draw a picture showing an example of reflection.</p> <p>(examples on pages 12 and 13 of book)</p>	

	illustrations.	The Energy We See)	<p><i>What object is probably best for reflecting light? (a mirror)</i> <i>What natural object reflects light like a mirror does? (water in a pond, etc.)</i></p> <p><i>Look at an object in the classroom. Talk to a partner about how you are able to see that object – Where is the light coming from to reflect the image to your eyes?</i></p> <p>Whole group: Make a chart listing different kinds of natural and artificial light.</p>		
W E D N E S D A Y	<p>Today read pages 14-20 only from <i>The Energy We See: A Look at Light</i>.</p> <p>Project pages of this book on large screen so that the whole class can have eyes on the text and on the illustrations</p> <p>Youtube video about light/shadows/dispersion of light: 3:36 https://www.youtube.com/watch?v=d7yTlp4gBTI</p>	<p>Today's explicit vocabulary instruction:</p> <ul style="list-style-type: none"> • Opaque • Transparent • translucent • shadow 	<p><i>What does it mean if something is opaque? (light can't go through it)</i> <i>Give an example.</i> (book, table, pencil, etc.)</p> <p><i>How are shadows created?</i></p> <p>*Conduct experiments on pages 15 and 16 using a flashlight *****</p> <p><i>What does transparent mean?</i> <i>Give an example.</i> (air, clear plastic, clear glass window)</p> <p><i>How is transparent different from opaque?</i></p> <p>*Conduct experiment on page 19 using flashlight and clear plastic wrap. *****</p> <p><i>What does translucent mean?</i> <i>Give an example.</i> (wax paper, stained glass windows, smoke, fog, lime juice)</p> <p><i>How is this different from opaque and transparent?</i></p> <p>*Demonstrate translucent for students with wax paper, a lamp with lamp shade, or lime juice in a glass.</p>	<p>Illustrate and label an example of opaque, transparent, and translucent.</p> <p>Teachers: Have students cut out the labels: opaque, transparent, translucent provided in writing prompt pages, and glue the labels next to their drawings.</p>	<p>Supplies needed today: Flashlight Clear plastic wrap Wax paper</p> <p>Optional: lamp with shade; lime juice</p>
T H U R S D A Y	<p>1. Read pages 21-22 of <i>The Energy We See: A Look at Light</i>.</p> <p>2. Demonstrate experiment on page 22 showing refraction of light – how light bends.</p> <p>3. Show Youtube video of simple experiment showing refraction: 3:05 https://tinyurl.com/yxco9yzj</p> <p>4. Replicate experiment in class</p> <p>5.. Read pages 23-29.</p> <p>6. Conduct color experiment with CD and flashlight on page 28-29.</p>	<p>Today's explicit vocabulary instruction:</p> <ul style="list-style-type: none"> • Refract (bend) 	<p>Pages 21-22 <i>How can light play tricks on our eyes? (it can bend, or refract)</i></p> <p><i>Give an example of refraction.</i></p> <p>*Demonstrate experiment with glass and spoon on p. 22</p> <p><i>Would other objects placed in the water also show refraction?</i></p> <p>Youtube video: <i>How did this experiment show refraction?</i></p> <p>*Repeat the video experiment in classroom using paper and markers.</p> <p><i>Would this experiment work with drawings other than arrows?</i> *****</p> <p><i>Pages 23-29 How many colors are we actually seeing when we look at light?</i></p>	<p>Ask students to illustrate one of the experiments from today in their writing journals. Encourage labeling using words from vocabulary cards.</p> <p>Allow them to choose between the refraction experiments and the color experiment.</p>	<p>Supplies needed today for page 22: spoon Glass filled with water</p> <p>Video experiment supplies: Markers Piece of paper Glass filled with water</p> <p>Supplies for Color experiment on pages 28-29: CD Flashlight</p> <p>Optional: hanger, string and 3 or more CD's</p>

			<p><i>How can we see the 7 colors? (by bending the light)</i></p> <p><i>What makes it possible for us to see the colors of a rainbow? (light is being refracted, or bent, in the air as it goes through falling rain water)</i></p> <p><i>*Conduct the experiment on pages 28-29 using a CD and flashlight</i></p>		
FRIDAY	Re-read <i>The Energy We See: A Look at Light</i> .		<p><i>How does light move? (straight line but it bends or refracts when it hits an object)</i></p> <p><i>Have you ever seen the rays of light coming off the sun? Are they straight or wavy? (straight)</i></p> <p><i>Turn to a friend and tell them one example of a natural light and one example of an artificial light.</i></p> <p><i>What do plants get from light? (ability to make food - energy)</i></p> <p><i>What if you heard someone say we don't need light to live. What would you say?</i></p> <p><i>Turn to a partner and tell them at least two reasons why light is important to life on Earth.</i></p>	<p>Gus says we don't need light to live on Earth. Is he right or wrong, and why?</p> <p>Differentiation: Advanced learners: Written response</p> <p>Mid-level learners: Draw and label all the ways that we need light to live.</p> <p>Tier II and III learners: Answer a yes/no question – Do we need light in order to live on Earth? Draw a simple illustration of a light source</p>	