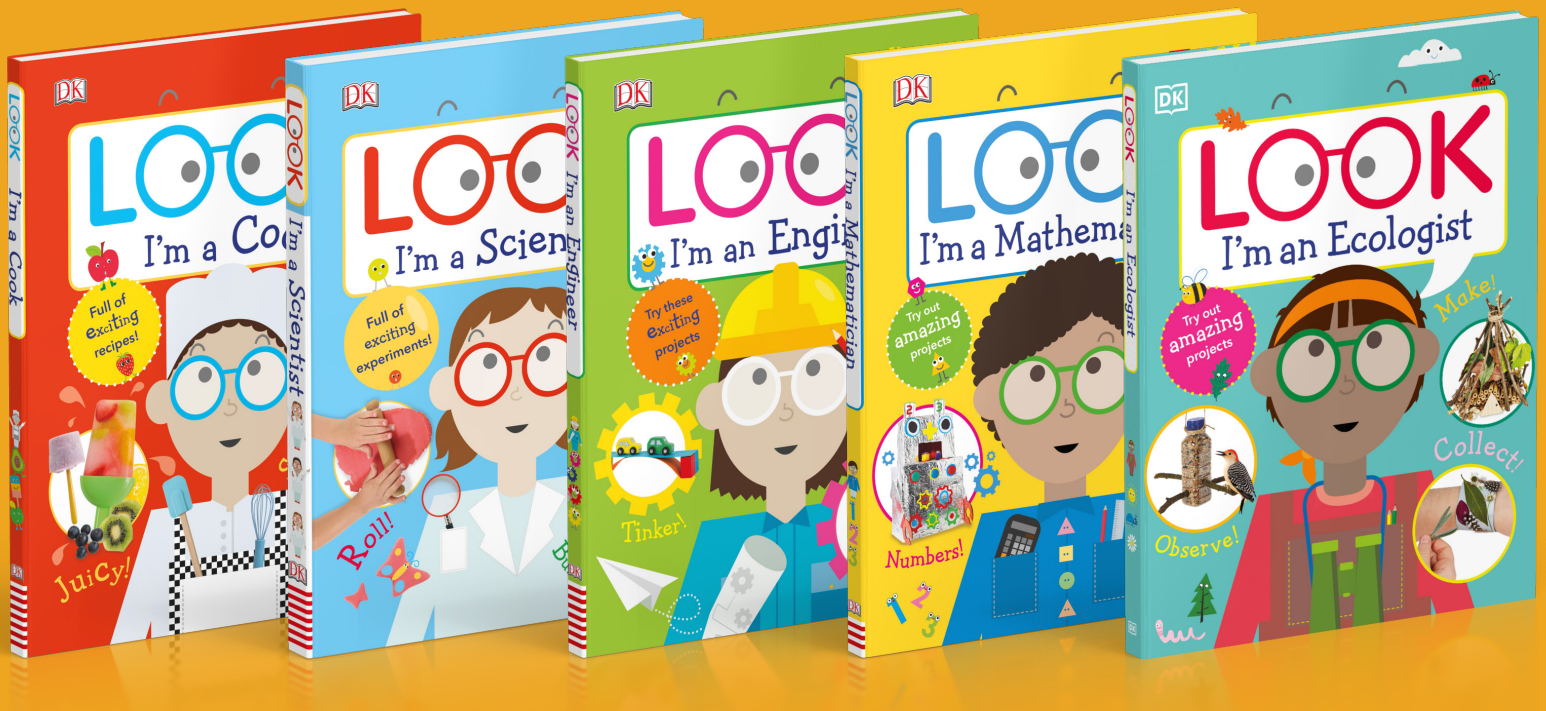
LOOK

I'm a...

Try these exciting activities



Teacher's Guide

Prepared by Courtney McKinney-Whitaker for

RIF Reading Is Fundamental RIF.org

DK Learning

LOOK I'm a... Teacher's Guide

Note to Educators

The books in this series present students with a variety of fun, educational, and hands-on activities that invite them to learn about various STEAM concepts by using their five senses. The books include instructions for experiments, recipes, and projects that will engage and inspire children to learn more about the world around them.

Each 48-page book begins with a two-page spread on pages 4-5 that introduces students to the "Curious Questions" they should ask as they complete each activity and to the many ways their five senses can help them in this task. "Look, you're a scientist/cook/engineer!" on page 46 connects the activities in the book to the work done by professionals in these fields. You may choose to introduce the concepts on these pages to students before you begin the activities. This will help students understand the real-world applications of their learning and may inspire even very young students to consider pursuing a career in one of these fields.

Activities are presented in spreads of two to six pages each. Bold black numerals will help students (even pre-readers or emergent readers) follow the steps in each activity, and engaging photographs will attract students to the pages. Important vocabulary words and instructions are noted in bold print or in speech bubbles, and the materials required for each activity are presented in a colorful box.

Most activities include a sidebar shaped like a clipboard. This sidebar provides a series of questions for students to answer through observation, all of which are aligned with the five senses. Using the clipboard questions with each activity will allow you to emphasize the main idea of this series, which is that scientists, cooks, and engineers ask questions and use their five senses to answer them through observation.

Whether you are using all three books or just one book in your classroom, begin your unit by exploring the book(s) with your students. Read aloud pages 4–5 and 46, and explore the titles of some of the activities together. Keep a list of activities students are especially interested in completing. You may then choose to follow your students' interests while aligning the activities you choose to complete as a class with grade-level standards. These books are recommended for students in grades PreK-1, and this teacher's guide is designed for use with any or all of the books in this series.

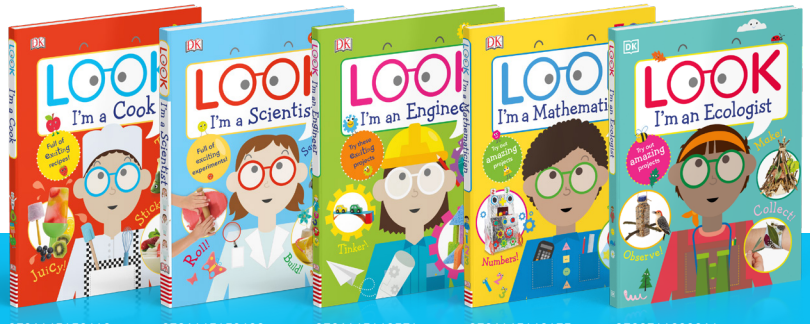
Lesson Plan

For additional resources go to RIF's Literacy Central (***www.rif.org/DK***). There you'll find word lists, puzzles, games, and other resources.

Discussion Questions

Pre-Reading Questions

What is a scientist/cook/engineer? What do people in this job do? How do they use their five senses to learn? What is an experiment/recipe/project? Can kids be scientists/cooks/engineers?



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LOOK I'm a... Teacher's Guide

Reading

Read the book with students as a group. Look at the cover and discuss what the book is about. Show the Table of Contents and read the titles of a few activities to give students an idea of what is in the book. Read and discuss the content on pages 4–5 and page 46. While you don't need to read every word of the activities aloud, take time to show students the pictures and read the titles of the activities. This preview will get students excited about completing the activities themselves.

After reading, make the book available for students to examine on their own. Emergent readers may be motivated to attempt to read the instructions, and pre-readers will enjoy looking at the pictures and practicing book handling skills.

Post-Reading Questions

Note to Educators: With pre-readers and emergent readers, answer these questions as a group. Completing this lesson plan as a whole fulfills the following standards: CCSS.ELA-LITERACY.RI.K.10 and CCSS.ELA-LITERACY.RI.1.10.

1 What is the main topic of this book? Look at pages 4-5 and page 46 to find details to help you answer this question. (CCSS.ELA-LITERACY.RI.K.2, CCSS.ELA-LITERACY.RI.1.2)

2 Your brain is not one of your five senses, but you definitely use your brain to learn about the world around you! What does your brain do with information from your five senses? (CCSS.ELA-LITERACY.RI.K.3, CCSS.ELA-LITERACY.RI.1.3)

3 Look at the front cover, back cover, and table of contents. Using the words and pictures you see, name some things this book will teach you to make and do.
(CCSS.ELA-LITERACY.RI.K.5, CCSS.ELA-LITERACY.RI.1.5)

4 Look through the book for the words in bold print or inside speech bubbles. Are any of these words new to you? Make a list of words you learned from reading this book, and discuss what the words mean.
(CCSS.ELA-LITERACY.RI.K.4, CCSS.ELA-LITERACY.RI.1.4)

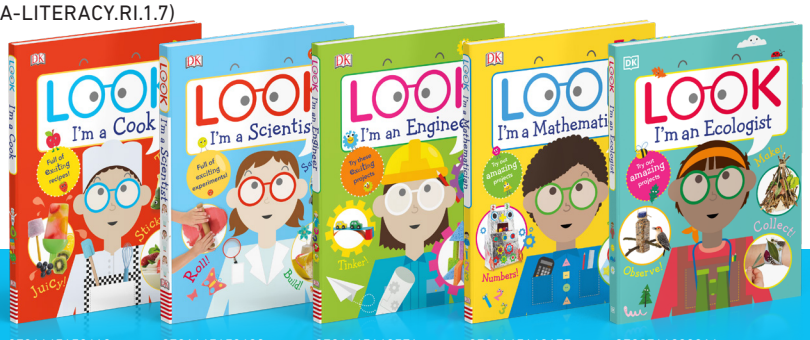
5 Choose an activity in the book. Describe the items listed in the "You will need" box using the words on the pages for this activity. Now look at the pictures, and describe the items using the pictures.
(CCSS.ELA-LITERACY.RI.K.7, CCSS.ELA-LITERACY.RI.1.6)

6 Look at "Look, you're a scientist/cook/engineer!" on page 46. What reasons does the author give to support the idea that completing the activities in this book makes you a scientist/cook/engineer?
(CCSS.ELA-LITERACY.RI.K.8, CCSS.ELA-LITERACY.RI.1.8)

7 Many activities include a sidebar shaped like a clipboard. How can answering the questions on the clipboard help you to make observations about the activity?
(CCSS.ELA-LITERACY.RI.K.1, CCSS.ELA-LITERACY.RI.1.1)

8 The activities in this book include numbered instructions, along with clear pictures of each step. What do you learn from the written instructions? How do the pictures help you understand what to do?
(CCSS.ELA-LITERACY.RI.K.7, CCSS.ELA-LITERACY.RI.1.6, CCSS.ELA-LITERACY.RI.1.7)

9 Which of the activities in this book would you most like to complete? How can you find out what materials you will need?
(CCSS.ELA-LITERACY.RI.K.1, CCSS.ELA-LITERACY.RI.1.1)



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LOOK I'm a... Teacher's Guide

Cross-Curricular Activities (Review and Assessment)

Note to Educators on NGSS Alignment: This series of books includes activities in various STEAM categories, some of which will match the NGSS for your grade level better than others. For each of the following exercises, direct students to those activities and topics that best match your grade level NGSS.

1. Writing Activity: Write a Page, Build a Book

Provide students with sheets of construction paper to create a page about an activity they would like to try. Students should use a combination of drawing, dictating, and writing to identify the title of the book and state an opinion or preference about which activity they would most like to complete. When all students have completed the assignment, gather the pages into a book for the class.

(CCSS.ELA-LITERACY.W.K.1, CCSS.ELA-LITERACY.W.1.1)

2. Data-Gathering Activity: What's the Weather?

Place a thermometer where it is easily accessible from your classroom. As a class, record the temperature and weather conditions at the same time each day, using a large chart that everyone can see.

When you have recorded the weather for a week, discuss what the weather conditions were like. Then brainstorm about how scientists/cooks/engineers work to make sure we are safe and comfortable in that type of weather. Answers may include ideas like conducting experiments to make sure we know what happens in this type of weather, preparing foods that help us stay warm or cool, and developing tools that protect us from various types of weather. As a class, construct a paragraph that describes the weather conditions, discusses how professionals in the given fields respond to this type of weather, and provides a concluding thought or reaction about these conditions.

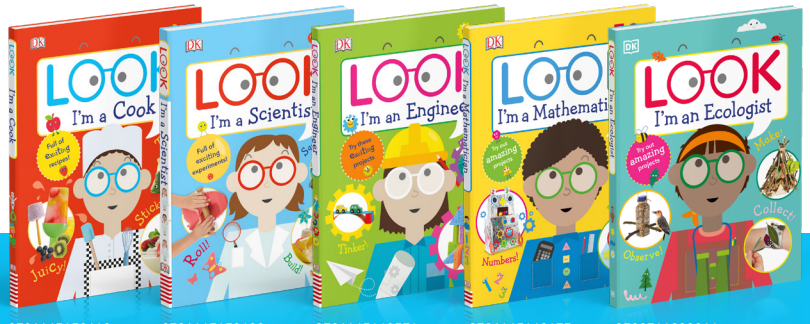
DAY	Temperature	Conditions (Sun/Clouds/Rain/Snow/Etc.)
MONDAY		
TUESDAY		
WEDNESDAY		
THURSDAY		
FRIDAY		

(CCSS.LITERACY.W.K.3, CCSS.LITERACY.W.1.3) (K-PS3-1, K-ESS2-1, K-ESS3-2, K-2-ETS1-1)

3. Research Activity: Let's Learn More!

Choose a STEAM concept from the book for your class to investigate further, and complete a related activity to give students hands-on experience of the topic. Bring in several other books on the concept you chose and explore these books as a class. Use chart paper to make a list of everything your class has learned about the topic. Make sure each student has a chance to contribute at least one item.

(CCSS.ELA-LITERACY.RI.K.9, CCSS.ELA-LITERACY.RI.K.10, CCSS.ELA-LITERACY.RI.1.9, CCSS.ELA-LITERACY.RI.1.10) (CCSS.ELA-LITERACY.W.K.7, CCSS.ELA-LITERACY.W.K.8; CCSS.ELA-LITERACY.W.1.7, CCSS.ELA-LITERACY.W.1.8)



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Cross-Curricular Activities (Review and Assessment - Con't)

4. Multimedia Presentation:Presenting Our Findings

Split students into at least two groups, depending on the size and structure of your classroom and grade level. (For example, if you have only one classroom on your grade level with a teacher and an aide, split your classroom into two groups. If you have more than one classroom on your grade level, each class can complete this project as a larger group.) Assign a different activity from the book to each group, and follow the directions below.

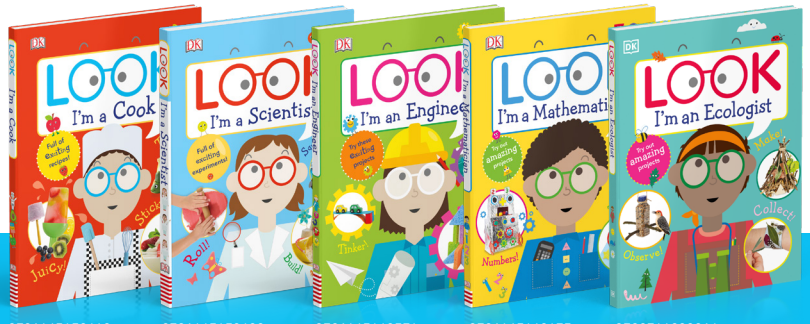
1. Using the digital resources available to you, research the topic of the activity you chose. Make sure each student has a chance to practice using digital tools.
2. Complete the activity with students. Take pictures of each step and record students' reactions.
3. Discuss the results of your activity and make a list of what you learned.
4. Using the digital resources available to you, put together a presentation that includes text, images, charts and graphs, video and audio clips, and/or other multimedia elements as appropriate. Make sure each student has a chance to practice using digital tools.
5. Have each group give their presentations to the other group(s), making sure that each student has a chance to practice speaking and listening and asking and answering questions.

(CCSS.ELA-LITERACY.W.K.6, CCSS.ELA-LITERACY.W.1.6) (CCSS.ELA-LITERACY.SL.K.2, CCSS.ELA-LITERACY.SL.K.5, CCSS.ELA-LITERACY.SL.K.6, CCSS.ELA-LITERACY.SL.1.2, CCSS.ELA-LITERACY.SL.1.3, CCSS.ELA-LITERACY.SL.1.5, CCSS.ELA-LITERACY.SL.1.6)

5. Problem-Solving Scenario: What's the Problem?

Brainstorm about some types of problems scientists/cooks/engineers solve for people. Together, choose one problem to focus on. Define the problem, and then act like a scientist/cook/engineer to develop a solution. Try to choose a problem that allows you to complete a hands-on activity, such as developing a model, as a solution. You may choose to complete an activity from the book or to develop your own. Either way, make sure the relationship between the problem and the solution is clear to students by participating in a shared writing project at the end of the activity. As a class, construct a short paragraph that defines the problem and describes how the solution you developed solves the problem.

(CCSS.ELA-LITERACY.W.K.3, CCSS.ELA-LITERACY.W.K.7, CCSS.ELA-LITERACY.W.K.8) (CCSS.ELA-LITERACY.W.1.3, CCSS.ELA-LITERACY.W.1.7, CCSS.ELA-LITERACY.W.1.8) (K-2-ETS1-1, K-2-ETS1-2)



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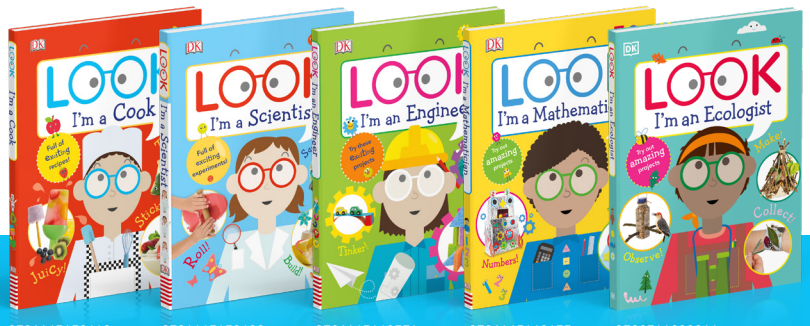
LOOK I'm a... Teacher's Guide

Look! I'm a Scientist Word List

BRAIN	The organ that gathers and makes sense of information from your five senses
CARBON DIOXIDE	A gas that makes lots of bubbles as it escapes from a liquid
EXPERIMENT	The process scientists use to test a hypothesis
FREEZING	When water turns to ice at 32 degrees Fahrenheit
HYPOTHESIS	A question scientists ask when they want to find out more about something interesting
LIQUID	A substance that can flow and change its shape
MAGNIFYING GLASS	A tool that makes objects look larger without making them look blurry
MELTING	When ice turns to water above 32 degrees Fahrenheit
PREDICTION	A guess scientists make about what will happen during an experiment
SCIENTIFIC METHOD	A set of steps scientists use to discover new information
SCIENTISTS	People who use their brains and senses to ask questions and discover something new
SOLID	An object that is stiff and holds its shape
VISCOUS	Thick and sticky, like slime



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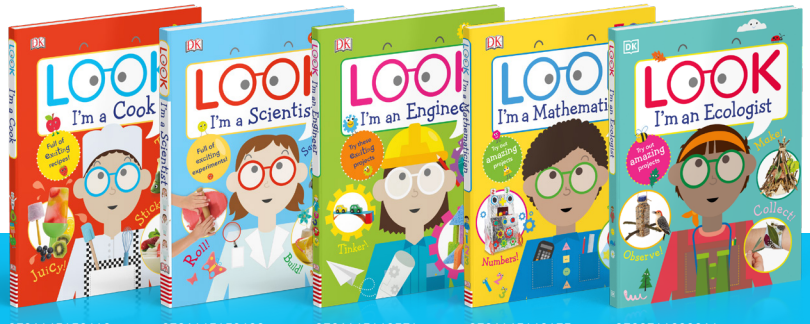
LOOK I'm a... Teacher's Guide

Look! I'm a Cook Word List

BRAIN	The organ that gathers and makes sense of information from your five senses
CACAO BEANS	The seeds of the cacao tree, which are mixed with sugar and milk to make chocolate
CARBON DIOXIDE	A gas that makes lots of bubbles as it escapes from a liquid
CHEFS	People who rely on their senses and skills to follow a set of steps when they cook
CHEMICAL REACTION	A change in ingredients caused by mixing ingredients or applying heat or cold
CITRIC ACID	A sour substance in all citrus fruits
DENSITY	The property that causes heavier liquids to sink under lighter liquids
KNEADING	A process of stretching, folding, and squishing bread dough that makes it strong
LIQUID	A substance that can flow and change its shape
PAPILLAE	Little bumps on your tongue that contain taste buds
SOLID	An object that is stiff and holds its shape
YEAST	A tiny fungus that helps bread to rise



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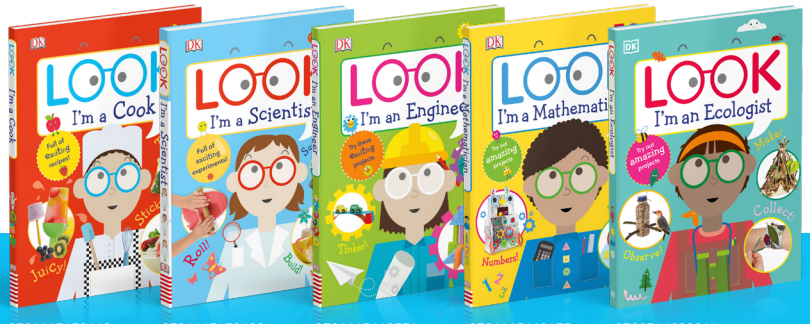
LOOK I'm a... Teacher's Guide

Look! I'm a Engineer Word List

AIR RESISTANCE	A kind of mini wind that pushes an object up as gravity pulls it down
BRAIN	The organ that gathers and makes sense of information from your five senses
BUOYANCY	A force that pushes things up in the water so that they float
ENGINEERS	People who use their brains, creativity, and senses to invent amazing things that make the world happier
GRAVITY	The force that pulls everything back down to Earth
LIFT	The force that allows an airplane to take off against the pull of gravity
MORTAR	A thick, sticky paste used to stick bricks together
PENDULUM	A heavy object at the end of a string
PYRAMID	A pointy shape with triangular sides
RENEWABLE ENERGY	Energy that doesn't harm the planet and will not get used up
SOLAR PANELS	Use the sun's energy to make electricity
TRIANGLES	Shapes with three straight sides that are used a lot in engineering



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