



## Using the Science of Reading Strategies with Your Keiki

What does it take to learn to read? *The Science of Reading* represents more than 40 years of scientific evidence about how the human brain learns to read and the most effective strategies for teaching children to read. Researchers found that learning to read involves two main components -- language comprehension and word recognition. These two components are broken down into 8 interconnected skills that contribute to proficient reading.

### **Language Comprehension:**

- Background Knowledge: Knowledge about the world/ various topics. Children gain this knowledge through books, songs, and everyday conversations.
- Vocabulary: An age-appropriate bank of vocabulary words
- Language Structures: Knowledge of sentence structure and that the order of words matters (e.g., "The cat chased the dog," is different from "The dog chased the cat.")
- Verbal Reasoning: Ability to understand what the text in a story is about
- Literacy Knowledge: Print awareness and knowledge of how a book "works" (e.g., identifying the front/back covers of a book, knowing we read from left to right, etc.)

### **Word Recognition Skills:**

- Phonological Awareness: Ability to recognize the spoken sounds in words and sentences (children gain this through rhyming, clapping syllables, etc.)
- Decoding: Knowledge that sounds are represented by written letters
- Sight Recognition: Ability to automatically read familiar words without sounding them out.



Giving children opportunities to gain these skills will provide them with a crucial foundation for reading success. In this newsletter, we will introduce some of the *Science of Reading* strategies to support your child's **language comprehension** at each age level -- infants, toddlers, and preschoolers.

## This newsletter includes:

- Age-specific information and suggestions about activities to do with your infant, toddler, or preschooler,
- Featured activities for each age group,
- How This Helps: a summary of your child's development by doing these activities together,
- **Resources:** for more information, and
- Suggested Books: a list of books to read with your child.



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## **Infants**

The foundation for reading success starts long before a child learns to read on her own. In fact, we can start to build language comprehension skills in a child beginning at birth! When you respond to your infant's natural curiosity through everyday interactions, such as talking or singing about the things around her, and reading books to her, you are helping to build the crucial language comprehension skills she needs in order to become a successful reader.

Try the following language comprehension strategies with your infant:

- Background Knowledge: Give her opportunities to explore objects through her senses. For example, walk in your neighborhood, and talk about the things she can see, hear, smell, and touch. You can say, "Look at this tall tree with pretty green leaves. The tree trunk feels rough." Gently take her hand to feel the bark and repeat, "It is rough."
- Vocabulary: Notice things that your infant looks at or reaches for, then name and



- describe them. For example, you can say, "This is a cow. Your cow is brown. The cow says moooo."
- ► Literacy Knowledge: Give opportunities to handle books hold it, mouth it, or turn pages. This helps her learn how a book works. Read books with clear pictures of common objects. As you read, point to the word and say it aloud.

## **Activity for Infants: Diaper Changing Talk**

What You Need:

Your normal diapering supplies Baby safe mirror

#### What to Do:

- Change your infant's diaper where she can see herself in front of a baby safe mirror.
  Point to her reflection and say, for example, "There's Sophie! I see your two eyes, and your nose!" (This builds background knowledge.)
- 2. Narrate your actions as you change her diaper. For example, say, "Now I'm lifting your legs up...up, up, up!" or "Here's a clean diaper..." (This builds *knowledge of language structures*.)
- 3. Name the objects you use during your diapering routine (e.g., diaper, wipes, cream). (This builds her vocabulary.)
- 4. You can also describe what your infant might be feeling, e.g., "The wipes are cold! You don't like it. It's too cold!"
- 5. End with a short song or rhyme before you lift her up. For example, as you move baby's legs slow and fast, "Motor boat motor boat go so s-l-o-w, Motor boat motor boat go so fast! Motor boat, motor boat step on the gas!" (See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)









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## **Toddlers**

Although every child develops at their own pace, most toddlers begin to imitate the words and sounds they hear around them. You may notice your toddler learning and acquiring new words almost daily. She may begin to ask questions about what she sees, hears, and experiences, such as "what's that?" or "why?" By acknowledging and responding to her questions and by continuing to read to her, you can build crucial language comprehension skills such as vocabulary, background knowledge, and knowledge of language structures.

Try the following language comprehension strategies with your toddler:

Background Knowledge: Help your child make connections between the stories she hears and her own life. For example, if you read a story about a butterfly, you might say, "We saw a butterfly in our yard yesterday. That butterfly was orange and black. Do you remember? This one in our story is colorful." Next time you see a butterfly, be sure to point it out to her. Say,



"Look! There's a butterfly– just like in our story of *The Very Hungry Caterpillar*."

- Vocabulary: Watch as your toddler moves and use this opportunity to name her actions (e.g., "You are pushing your red chair"), and use positional words too (e.g., "You are climbing over the pillow").
- Language Structure: Toddlers naturally learn about language structures (that the order of words matters) by observing and imitating the speech they hear around them. When your child mixes the order of words (for example, says, "Up go," instead of "Go up"), gently repeat the correct phrase, "You want to go up!" and then lift her up and say, "Go up!"

## **Activity for Toddlers: Literacy Walk**

What You Need:

none

#### What to Do:

- 1. Take your child out for a walk in your neighborhood.
- 2. Point out the print that is all around (the names of the markets, banks, restaurants, traffic signs, etc.) As you point, say it aloud. For example, "This sign says 'Stop -S-T-O-P'." (This builds *literacy knowledge*.)
- 3. Talk about what the business is for. For example, "Safeway is a market. That's where we buy our food to eat. Let's see what kind of food is inside Safeway." Point out some of the foods that your toddler is familiar with. (This builds background knowledge.)
- 4. Point out things you pass on your neighborhood walk for example, a fire hydrant, a water fountain, a parking structure, the red ginger plant, etc. (This builds her *vocabulary*.)
- 5. You can talk about the order of the places you saw. For example, "First we passed by the bank, then we went into the market, next we saw the fountain in front of CPK." (This builds knowledge of *language structures*.)
- 6. Take your time and have fun interacting during your neighborhood walk! (See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)







## **Preschoolers**

Preschoolers show an increased interest in seeking new knowledge. Your child may be asking a lot of questions and using more descriptive words (such as color, size, shape, and location of objects). Their sentences are more complex and include richer vocabulary. By deepening your conversations and interactions with her and reading to her daily, you can build crucial language comprehension skills.

Try the following language comprehension strategies with your preschooler:

- Background knowledge: Expose your child to many experiences outside of the home by visiting tidepools, museums, aquariums, etc. Talk about the things she sees and experiences. Take her to the library to borrow informational books on the topics she is interested in. Talk to her about the uses of objects. E.g., "What is an umbrella for?"
- Vocabulary: Intentionally use more complex words. When reading a story to your child and you come across a word she doesn't know, teach her the word by doing the following: 1)



Have her repeat the word – for example, "Say 'fretting." 2) Talk about its use in the story -- "In our story, Camilla was fretting over what to wear." 3) Tell her what it means – "Fretting over something means you are worried." 4) Apply the word and use some examples – "You might fret if you lost your favorite toy."

Verbal Reasoning: Comment and ask questions such as, "Johnny looks tired today. How can we tell?" or "It looks cold outside. How do we know?"

## Activity for Preschoolers: "I Went to the Zoo" Book

What You Need:

Printed photos of 4-5 animals your child saw at the zoo

Blank pieces of paper

Glue or Scotch tape

Marker

Stapler

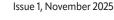
#### What to Do:

- 1. Tell your child you will make a book together about her trip to the zoo.
- 2. Show her the photos and talk about the animals she saw at the zoo.
- 3. Help her glue or tape the photos to the blank pieces of paper (one photo per paper).
- 4. Take turns thinking of a sentence or two for each picture and write them above or below the photo. (For example, "I saw an elephant at the zoo. It was big.")
- 5. Fasten the pages of the book by stapling the pages together on the left side of the sheets of paper.
- 6. Read the book to your child. Ask your child to "read" her zoo book back to you.

Variation: Make a book for other places you have visited (e.g., beach, park, the market, etc).

(See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)









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# **How This Helps**

The activities suggested in this newsletter help promote many different aspects of development:

## **Physical Development**

- Use and strengthen large muscles such as neck, arms, and legs
- Use and strengthen small muscles such as facial muscles, fingers, hands, and toes

## **Social and Emotional Development**

- Develop a close bond with you
- Feel important and good about herself

## **Language and Literacy Development**

- Develop early reading skills and a love of reading
- Build verbal skills, vocabulary, and use of descriptive language



## **Cognitive Development**

- Develop her thinking and problem-solving skills
- Learn to ask and answer questions

## Kids in the Kitchen

Cooking teaches valuable lessons such as math (quantities, measurement), science (how matter changes), fine motor (stirring, pouring), and literacy (print awareness). As you make this recipe with your child, talk about kitchen safety. Show her how to handle items safely and allow her to do as much as she is capable of. Praise her efforts, and ask questions throughout the process to encourage her thinking skills. Most of all, have fun!

### **Reading Readiness While Making Pancakes**

Adapted from: PBS for Parents https://www.pbs.org/parents/recipes/easy-pancake-recipe-stem-learning-in-the-kitchen

#### Ingredients:

- 1 cup flour
- 1 teaspoon baking powder
- 1/4 teaspoon baking soda
- Pinch of salt
- 1 cup buttermilk
- 1 egg
- 2 tablespoons melted butter, room temperature
- Toppings of your choice (e.g., strawberries, blueberries, sliced bananas, maple syrup)

### Directions:

- 1. Show your child the recipe and tell her you will be reading these directions (this will build her *literacy knowledge*).
- 2. Mix dry ingredients in a large bowl. Name each ingredient to build her *vocabulary*.
- 3. Mix wet ingredients in a medium bowl. Talk about where milk and eggs come from to build background knowledge.
- 4. Pour the wet ingredients into the dry ingredients. Mix until just combined.
- 5. Pour about ¼ cup of batter onto a hot, lightly greased griddle.
- 6. Cook over medium heat until you see bubbles form on the top of the pancake, and the bottom of the pancake is brown.
- 7. Flip, and cook 1-2 minutes more, or until the other side is brown. Ask, "How do we know it's done?" to build *verbal reasoning skills*.
- 8. Add toppings! Eat and enjoy!
- 9. While eating, talk about the steps you used to make the pancakes to build knowledge of *language structures*.







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## **Resources**

# Science of Reading: The Reading Rope by Calgary Reads

https://www.readingrockets.org/videos/meetexperts/scarboroughs-reading-rope

This video nicely presents a detailed overview of Scarborough's Reading Rope, and the two key strands (language comprehension and word recognition), and eight related skills which are crucial for reading success.

# So Much More Than the ABCs by Molly Collins and Judith Schickedanz

Written by early childhood and literacy experts, this book will help families and early childhood



professionals support young children in acquiring the understandings, knowledge, and skills needed for later success in learning to read and write.

# **Suggested Books**

Discover these books and more at the **Hawai'i State Public Library** www.librarieshawaii.org.

## **Infants and Toddlers**

See, Touch, Feel 123 by Roger Priddy

"One happy baby smiling at you...Two furry teddies with bows, big and blue..." This is a great first book for young children, with raised textures to explore, real photos, and rich language. It's sure to be a favorite for infants and toddlers!

### Spot's First 100 Words by Eric Hill

Little ones will love this engaging lift-the-flap book as they join Spot and his family and friends on adventures to the park, the beach, the playground, and more – and discover key words along the way.

### **Preschoolers**

### Who What Where? by Olivier Tallec

In this charming interactive book, each page asks a question about the characters featured, such as "Who left a jacket at home?" "Who's under the tablecloth?" Children must hunt for clues and use verbal reasoning skills to find the answer.

#### I Wonder Why Camels Have Humps and Other Questions About Animals by Anita Ganeri

In this informational book, children learn the answers to questions about animals, such as, "Why do leopards have spots?" and "Which fish can climb trees?" It's a fascinating question and answer book all about animals, presented in a fun and engaging way. A great book for building children's background knowledge about animals!

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