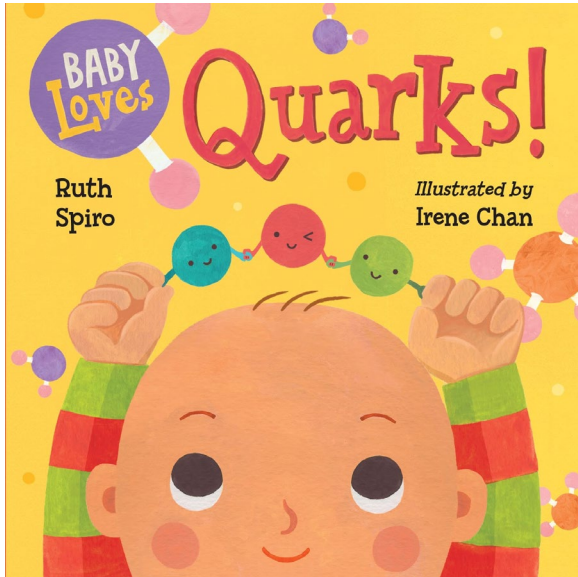




BABY LOVES QUARKS!

STORYBOOK CONVERSATIONS WITH YOUR YOUNG CHILD

Every child is different, and these are only suggested adaptations and activities. Do what works best for encouraging your child's exploration during this literacy activity. Consult your pediatrician, physical therapist (PT), and/or occupational therapist (OT) first.



Did you know reading books is a great opportunity to support STEM learning?

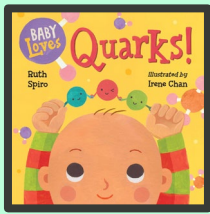
Baby Loves Quarks! is a book written by Ruth Spiro Benton and illustrated by Irene Chan.

Comparisons between a baby's toys and atoms introduce your child to **science concepts** in a simple and exciting way! This one of several books in the Baby Loves Science series.

- If you do not have a paper copy of this book, watch a YouTube video of someone reading the book. If you prefer to read it to your child yourself, just mute the audio.

https://www.youtube.com/watch?v=M-UqV_m5tGE

- Check your local library to see if it allows you to borrow a digital version of this book to read on a laptop, tablet, or phone.
- Or find it online: <https://ffl.kohavt.org/Hoopla/11851582?searchId=2724357&recordIndex=20&page=1&referred=res ultIndex>



BABY LOVES QUARKS!

BOOKMARK

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- Print this page and cut around the edges.
- Reading with babies and toddlers uses strategies such as:
 - Pointing to pictures
 - Using expressive facial features and voices
 - Spending as much time as your child wants on pages, they are very curious about
 - Modeling the right answer to help your child learn new words
 - Asking simple Wh-questions, such as "What is this color?"
- Look at STEMIE's tips for making adaptations to the storybook reading process and on the following pages:
<https://stemie.fpg.unc.edu/guide-book-adaptations>
- If you print this page, you can download or view online by scanning the QR code below.



Foundational | Science

Baby Loves Quarks!

By Ruth Spiro



Point to pictures



Be Expressive!



Model correct answers
"Smash. Say 'Smash.'"



WH questions
"What sticks together?"
[quarks]



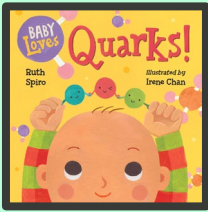
Do not rush
Wait for a response after a comment or question

STEM Words & Ideas to Explore

- Atoms and Molecules
- Part and Whole
- Building



stemie.fpg.unc.edu



BABY LOVES QUARKS!

ADAPTATIONS

STORYBOOK CONVERSATIONS WITH YOUR YOUNG CHILD

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SUPPORT CHILDREN WITH VISUAL IMPAIRMENT/DEAF-BLINDNESS/MULTIPLE DISABILITIES:

STORYBOX

Select corresponding items and place them in a container/box. Items may include:

- Colorful blocks
- Colorful balls
- Bowls to put the balls in to show they are together in a group (i.e., a molecule)



Image credit: Clipart-Library.com

This adaptation can also...

- Increase children's attention and engagement
- Support children with sensory challenges



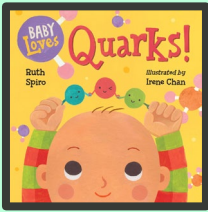
Follow your child's lead and interests. Enthusiastically ask your child questions about what they are doing and what they like.



Answer your child's questions. If you do not know the answer, work together with your child to discover the answer.



Encourage your child to participate in the activity as much as possible. Praise your child's efforts and successes.



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SUPPORT ALTERNATIVE WAYS OF COMMUNICATION:

PICTURES, SYMBOLS, SIGNS, AND/OR ICONS

- Select pictures that correspond to items/objects/animals in the book
- Add signs and icons to the story
- Use pictures along with a communication board to support STEM learning



Image Credit: STEMIE

This adaptation can also...

- Increase children's attention and engagement
- Support children' learning
- Support children who are deaf/with hearing impairment



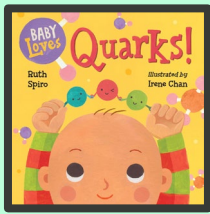
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VISUAL CUES:
USE TO PROMPT

HOW TO:

Step 1: Print and cut out the images. You can also create your own visual cues (empty squares included).

Step 2: As you read, use tape or Velcro to attach the pictures to the corresponding pages in the book.



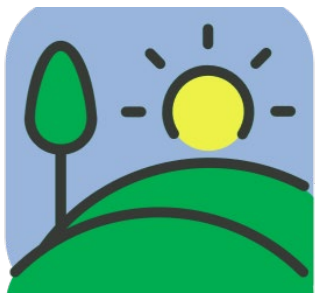
Baby



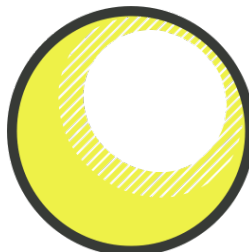
Build



Blocks



Nature



Quark



Three



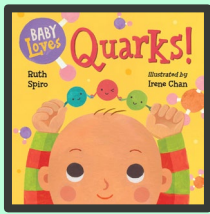
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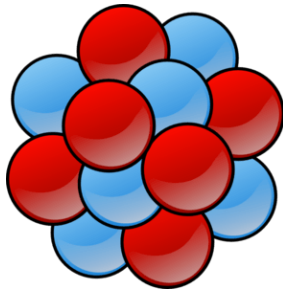


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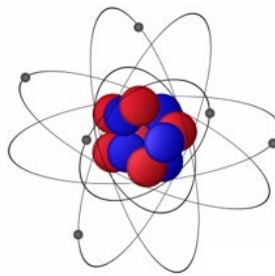
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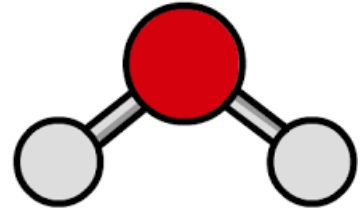
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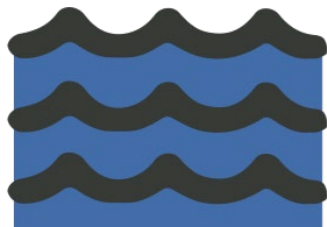
Nucleus



Atom



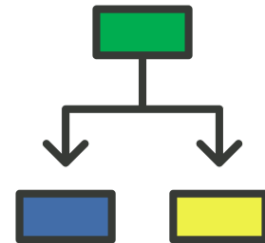
Molecule



Water



World



Break



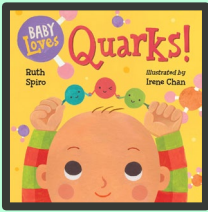
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EXPLORATION I

STORYBOOK CONVERSATIONS WITH YOUR YOUNG CHILD

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Builder

Description: Help your child observe and investigate the characteristics of blocks and spatial positioning.

While building with blocks, Lincoln logs, and/or other stacking toys, use language such as **“on top, up, on bottom, beside”** to begin facilitating those **spatial concepts** required in daily life and **engineering/building** tasks. You can also explore what makes a **good material to build with**.

What My Child Is Learning!

Children learn best by interacting with people and objects. Introduce STEM words, ask questions, and encourage them to build with blocks. Help your child make a connection between objects and **spatial positioning** and real-life experiences, while developing creativity, problem-solving, and collaboration skills.

While building with blocks with your child, describe where the block is going. Say, for example, **“I put a block on top.”** Try messing up a tower on purpose. For example, stack a large block on top of a smaller one, and problem solve with your child how to fix it.

While children are learning how to express words, they may already have numerous ways to communicate! Watch for their cues as they may express their curiosity and interest by turning toward or pointing to the blocks. Using open-ended questions offers an opportunity for children to explore the block that they are interested in.

Introduce various textures by using blocks that are **soft/fabric**, and **hard/wood/plastic**. Talk about how the **different textures** feel and encourage your child to **touch and explore**.

Try building with things that are less sturdy as well, like cotton balls, to see how they **fall down** by themselves, as compared to harder materials like blocks that do not fall over by themselves.

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ADDITIONAL ACTIVITY IDEAS

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- Learning about atoms and molecules is exciting but also challenging to teach young children because these concepts are seemingly invisible. As you go about your day with your child, point out that everything is made up of atoms and molecules, even though we can't observe them by themselves. Activities focused on making an atom or molecule bigger and more concrete can be great tools for parents and teachers. Check out this activity where children, as young as toddlers, can make models of atoms. You can also scale this activity down by simply gluing pom-poms on a piece of paper and helping the child draw lines between them to show they are connected. This activity is also great for tactile learners and children with visual impairment/blindness.

<https://kidsactivitiesblog.com/47951/atoms-molecules-fun-wayslearn/>

- Check out our Discovery Play Activities for Building Blocks.

