

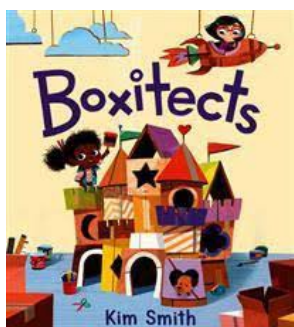


DID YOU KNOW READING BOOKS IS A GREAT OPPORTUNITY TO SUPPORT STEM LEARNING?

Reading with older toddlers and preschoolers uses **PEER**:

- Use additional Prompts if needed,
- Evaluate and
- Expand your child's answers, and
- Repeat the prompts.

ABOUT THIS BOOK



Boxitects is a book by Kim Smith. Meg and Simone learn to collaborate together to create an extraordinary **design** out of **boxes**. What can you and your child **build** together with boxes?

WHERE CAN I FIND THIS BOOK?

Search [YouTube](#), [BookShare](#), [Archive.org](#), and your local library.

ADAPTATIONS

STEMIE's tips for making adaptations to the storybook reading process

<https://stemie.fpg.unc.edu/resource/a-guide-to-book-adaptations/>

Scan the QR code to download or view online.



Expanding | Engineering

Boxitects

By Kim Smith

Complete a sentence



Meg was a _____." (boxitect)."

Recall



"What did Meg and Simone do to finish the contest? (call a truce)"

Open-ended questions



"Why do you think the treehouse ship fell over?"

WH questions



"What ultimately knocked over Meg and Simone's project?"

Distancing questions



"What can you create with boxes?"

STEM Words & Ideas to Explore

- Box
- Build
- Bumpy & Flat
- Strong & Weak





BOXITECTS

ADAPTATIONS FOR STORYBOOK CONVERSATIONS WITH YOUR YOUNG CHILD

Every child is different. Do what works best for encouraging your child's independent exploration during this suggested literacy activity. These are only suggested activity adaptations. Consider consulting your child's care team first.



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.

SUPPORT CHILDREN WITH VISUAL IMPAIRMENT, DEAF-BLINDNESS, OR MULTIPLE DISABILITIES:



Storybox:

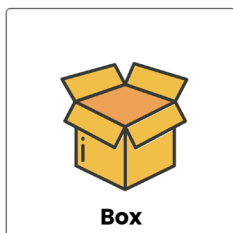
Select corresponding items and place them in a container or a box. Items may include:

- Small boxes
- Toy houses
- Tubes

This adaptation can also be used to:

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

SUPPORT ALTERNATIVE WAYS OF COMMUNICATION:



Box

Pictures, Symbols, Signs, or Icons:

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

This adaptation can also be used to:

- Increase children's attention and engagement
- Support children's learning
- Support children who are deaf or have a hearing impairment



BOXITECTS

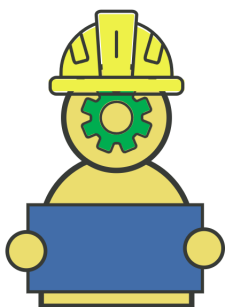
VISUAL CUES FOR STORYBOOK CONVERSATIONS WITH YOUR YOUNG CHILD

How To Use VISUAL CUES:

1. Print and cut out the images.
2. As you read, use tape or Velcro to attach the pictures to the corresponding pages in the book.

Check out STEMIE's tips for creating and using visual supports with

[A Guide to Visual Supports.](#)



Architect



Box



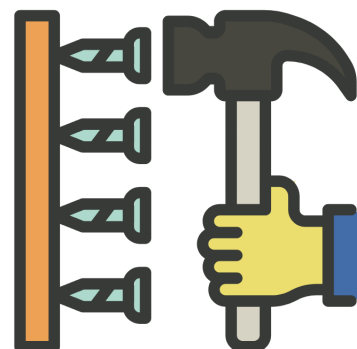
House



Tower



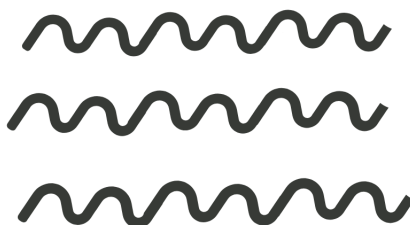
Tunnel



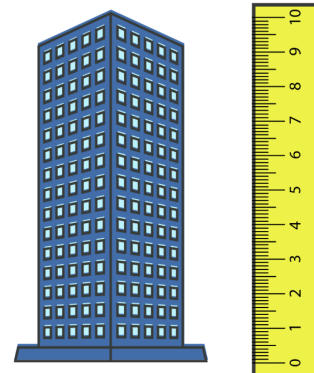
Build



Flat



Bumpy

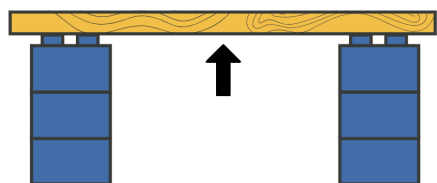


Tall

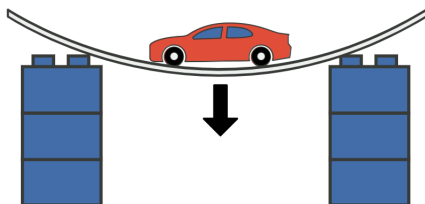


BOXITECTS

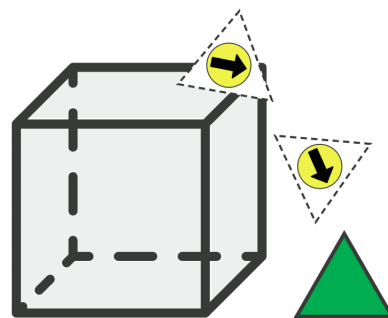
VISUAL CUES FOR STORYBOOK CONVERSATIONS WITH YOUR YOUNG CHILD



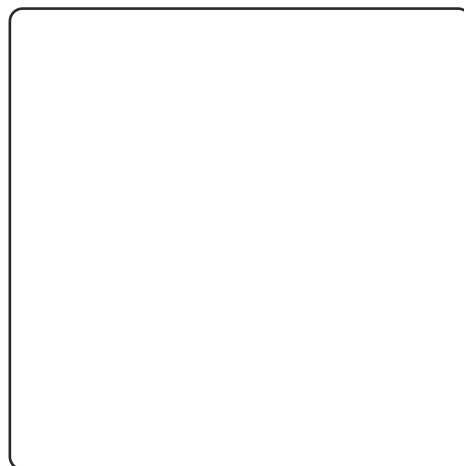
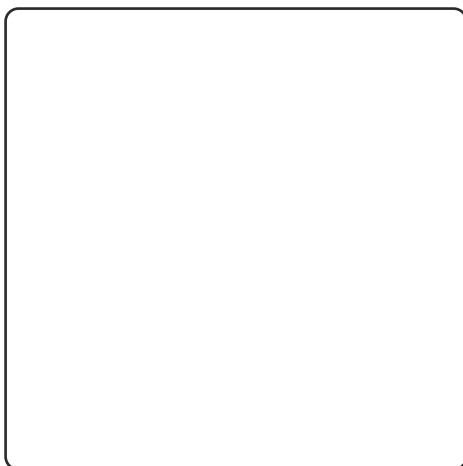
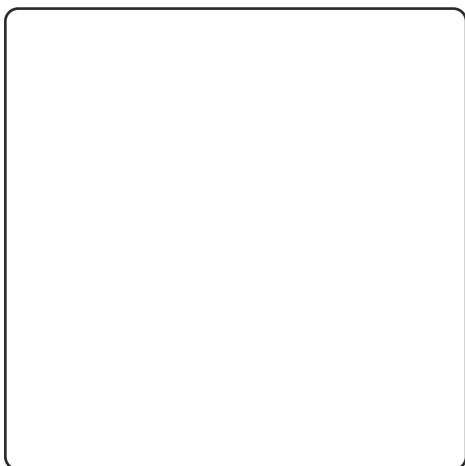
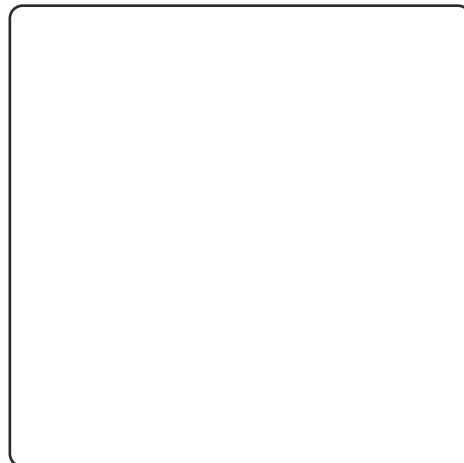
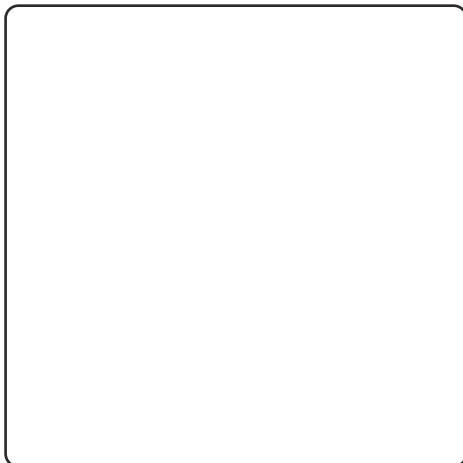
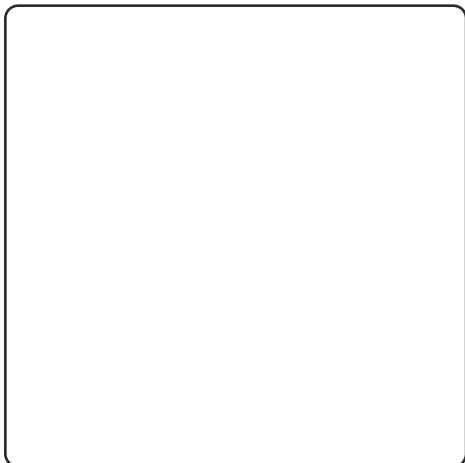
Strong



Weak



Fall



Need more visual cues?

Use the empty squares above to create your own or visit [STEMIE's Visual Cue Library](https://stemielearningtrajectories.com/visual-cue-library).



BUILDING WITH BOXES



Description: Help your child **make a plan** to **create** something from their imagination using a box.

Also help your child to **test** and **evaluate** their box **plan** and what they **build**.

What My Child Is Learning!

Early engineering for young children is about exploring, playing, and figuring out how things work by trying ideas, testing them, and learning from what happens.

Encourage your child to **consider** if their box build looks and does what they planned for it to do.

Use drawing utensils (pencils, crayons, markers) and paper to help draw a **plan** for your child's next construction. Decide together which elements are important (walls and roof for a house; wheels and headlights for a car) and work to "carry out" their **plan and build** with the box.

Provide recycled boxes (such as cereal boxes, shipping boxes, or macaroni and cheese boxes) and invite your child to decorate them however they wish as an expression of themselves. Re-using and recycling packing materials or cardboard boxes to build is a wonderful way to for children to practice elements of the **engineering design cycle (exploring, planning, testing, evaluating, and adjusting)**.

Compare properties of different materials and objects used to construct (**big/small, hard/soft, flat/bumpy**).

Encourage your child to look at "real" houses, vehicles, and design a box like it. Ask, "Is our box a "real" car? Why not? What would we need to make a real car?"



BOXITECTS

ACTIVITY IDEAS FOR STORYBOOK CONVERSATIONS WITH YOUR YOUNG CHILD

ADDITIONAL ACTIVITY IDEAS:

- Build bridges out of different materials and compare their effectiveness, record and graph observations.
- As a variation of Peek-a-boo, use a box to hide under, then reveal with an enthusiastic 'Peek-a-box.' Encourage your child to hide themselves and then reveal.
- Stack small boxes in short towers and go bowling! See if you can knock over the towers with a ball. Encourage your child to predict and test which box towers get knocked down.
- Use spatial and positional language! Use these tips for integrating spatial and positional language into everyday conversation. Ask, "What did you **create**?" "Can you fit [**inside, outside, on top of, under**] of it?" "What is it for?"
- Create a box "city" with your child. Gather boxes of different sizes and determine what buildings you might need in a city. Then plan with your child what buildings to make out of each box. Keep notes and document any adjustments you need to make as you go!
- Check out our [Discovery Play Activities](#) for:
 - Building Blocks
 - Tinker/Inventor's Box

