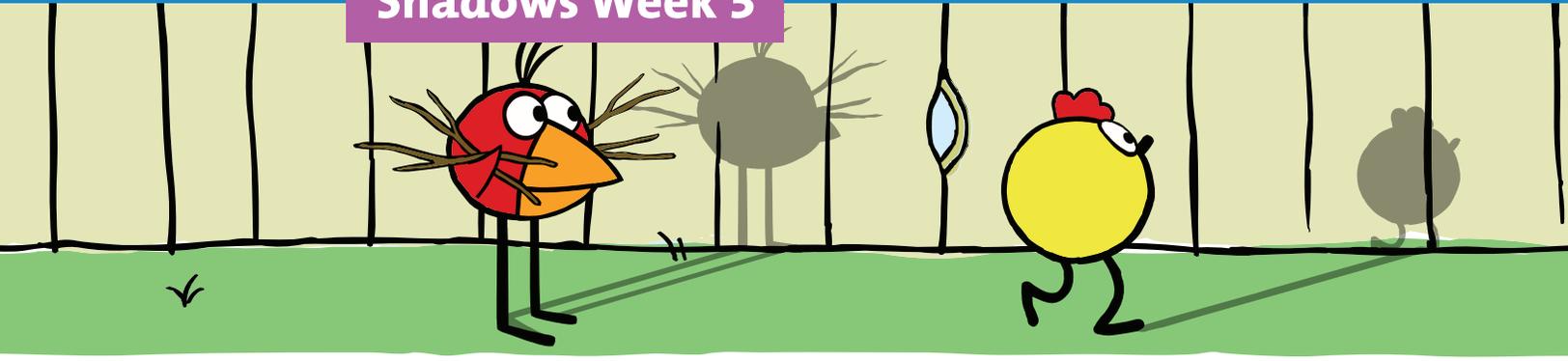


Shadows Week 3



Exploring Indoor Shadows

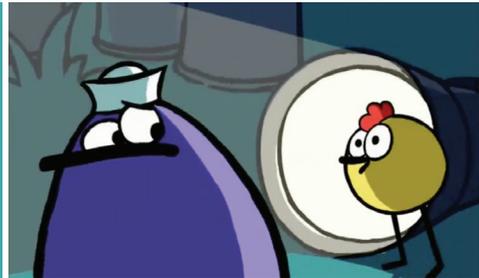
Make shadows indoors with a lamp or flashlight.

Day 1 (20–30 minutes)

VIDEO

Night Light

It's dark and scary! Then Peep and Quack find a flashlight and have some fun.



What Your Child Will Learn

Science skills: Observing, describing, and comparing shadows

Science ideas:

- You can make shadows with your body and other objects if there is a light source.
- Shadows disappear when the light disappears.

Vocabulary words to practice: shadow, big, flashlight

What You Need

- Video: *Night Light* (9 minutes)

What to Do

Sit together so you can talk about the video while you watch.

1. Before you watch, SAY: Peep and Quack find a **flashlight** and use it to make **shadows**. Talk about how a **flashlight** works and what it's used for. Or show your child the **flashlight** feature on your phone.

2. After you watch, ASK:

- What did Peep and Quack do to make **shadows** with the **flashlight**? What could you do?
- How did Peep make his **shadow bigger** than Quack's? I wonder if we could do that?



Ask Questions and Talk About Ideas

Take turns listening and speaking.

ACTIVITY

Shadow Hunt

Use a flashlight to make shadows indoors.



What Your Child Will Learn

Science skills: Observing, describing, and comparing shadows.

Science ideas:

- A shadow shows the shape of an object, but it doesn't show many other details.
- You can change the shape of a shadow by moving and turning your body or turning an object.
- Indoors, you can change the size of a shadow by moving your body or the object close to or farther from the light.

Vocabulary words to practice: shadow, light, change, big, small, flashlight, sunlight, shine, notice, different, experiment, disappear, predict

What You Need

- flashlight or flashlight on phone

What to Do

1. Dim the **lights** and give your child a **flashlight** or use the **flashlight** on your phone. Have your child **shine** the **light** on objects around the room and point out the **different shadows**.



Play and Explore Together

Guide your child's science play—but don't take over!

2. Have your child **experiment** with making the **shadows bigger** and **smaller**. ASK:
 - Try moving the **flashlight**. What do you **notice**?
 - How does the **shadow change** if you move the **flashlight** closer to the object?
 - What do you **notice** when you move the **flashlight** farther away?
 - How can you make the **shadow disappear**?

3. Have your child **experiment** holding the **flashlight** in **different** positions near an object.
ASK:

- What did you **notice** about the **shadow**?
- What kind of **shadow** do you see when you **shine** the **flashlight** straight down on an object?
- Move your **flashlight** in a circle above the object. What do you **notice** about the **shadow**?
- What do you **notice** about the **shadow** when you **shine** the **flashlight** on the side the object? What's the longest, skinniest **shadow** you can make? How did you make it? Can you make one that's short? What about wide?



Ask Questions and Talk About Ideas

Ask questions to help your child think more about the activity. Start a question by asking, "What do you think ...?"

Keep Learning!

- Turn off your **flashlight** and point it at an object. Take turns **predicting** (thinking) where the **shadow** will be when you turn the **flashlight** on. Then turn on the **flashlight** to see if you were right.



Ask Questions and Talk About Ideas

Talk out loud about your ideas so your child can learn from listening to you. Start by saying "I wonder ...," "I think ...," and "What if ...?"

- You just made indoor **shadows** with a **flashlight**. Now **notice** indoor **shadows** that are made when **sunlight** or a bright **light** comes in a window.
- Talk about all the **different** kinds of **light** that can make **shadows**.



Explore More!

Explore the same science topic in a different place. Notice the difference between indoor and outdoor shadows and light.

Day 2 (20–30 minutes)

VIDEO

Night Light

It's dark and scary! Then Peep and Quack find a flashlight and have some fun.



What Your Child Will Learn

Science skills: Observing, describing, and comparing shadows

Science idea: You can change the shape of a shadow by moving and turning your body or an object.

Vocabulary words to practice: shadow, notice

What You Need

Video: *Night Light* (9 minutes)

What to Do

Watch the video again to make new discoveries. Talk about what you **noticed** this time.



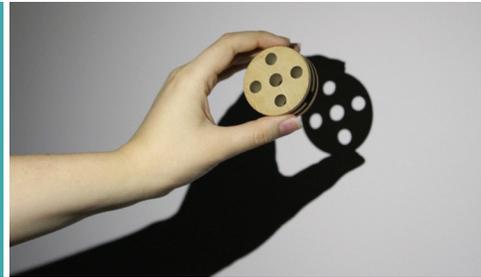
Ask Questions and Talk About Ideas

Take turns listening and speaking.

ACTIVITY

Indoor Shadow Shapes

Make shadow shapes using your hands and things around your home.



What Your Child Will Learn

Science skills: Testing, observing, and experimenting with shadows, describing and comparing them, and sharing ideas

Science ideas:

- You can change the shape of a shadow by moving and turning your body or turning an object.
- Indoors, you can change the size of a shadow by moving your body or the object close to or farther from the light.

Vocabulary words to practice: shadow, light, different, shape, compare, same

What You Need

- bright lamp or flashlight (for making shadows)
- camera on phone (for taking pictures or videos)
- blank wall to make shadows on
- objects around your home that might make interesting shadows (comb, toys, yarn, colander, etc.)

What to Do

1. SAY: Let's make **shadows** using your hands and **different** things we find around the home.
2. Dim the lights and shine the **light** onto a wall.
3. Use your hands to make **shadows**. ASK:
 - How can you move your hands and fingers to make a **shadow** that looks like a heart? What about a bunny rabbit or a bird? Can you make the bunny hop and the bird fly?
 - What other funny **shadows** can you make with your hands?
4. Take pictures or videos of the **shadows**.
5. Next, make **shadows** using things around the home. ASK:
 - Turn the object in different ways. How many **different shadow shapes** can you make using only one object?
 - When does the **shadow's shape** look the most like the object? When is it hard to tell what the object is?
 - What happens when you move the object closer or farther from the **light**?



Ask Questions and Talk about Ideas

The more you talk together, the more your child learns.

6. Try holding two or three objects together to make one **shadow**. ASK: What does this new **shadow** look like? Can you tell what the **different** objects are by looking at the **shadow**?
7. Take pictures or videos of the **shadows**.

Talk About What You Learned

Look at the pictures or videos of your **shadows**. See if you can remember which objects made those **shadows**. ASK: Did you use the **same** object to make **different shadow shapes**? What did you do to make the **shadows** look **different**?



Ask Questions and Talk About Ideas

Take pictures or make videos and discuss. To learn, children need to reflect (think about) what they did.

Keep Learning!

- Experiment with making lighter and darker **shadows**. Make **shadows** with objects you can see through (clear plastic container or a sandwich bag). **Compare** them to the **shadows** of solid objects (book or mug). ASK: *What's **different** about these **shadows**? Why do you think the objects you can see through make **different shadows**?*



Explore More!

Add new materials to explore in a different way.

Online Game (Optional)

Go to the PEEP and the Big Wide World website (peepandthebigwideworld.com) and play a game about shadows called *Night Light*. Use the flashlight to help Peep find animals hiding in the dark.



Play, Talk, and Explore More!

Notice what got your child excited about making indoor **shadows** this week and repeat those activities. Or get creative and invent your own indoor **shadow** activities. You know what interests your child more than anyone. The more you play, talk, and explore together, the more you help your child think, learn, and grow.



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