**AUTHOR:**

Grace Lin

Join three friends for some bubble blowing fun as they make bubbles using circular, triangular, and heart-shaped wands.

**Ages:** Infant to 5 years

**ATOS Reading Level:**

N/A

**Lexile:** AD280L

**ISBN:** 9781623541248

**Copyright:** 2020

# Circle! Sphere!

**Can you blow a heart-shaped bubble with a heart-shaped wand?**

**Math Connections:**

Shapes

Patterns

Cause and Effect

Spatial Awareness

Science

**Activities To Do Together:**

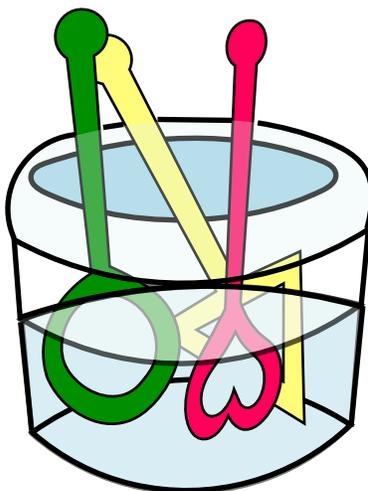
- Blow bubbles for your baby. Bubble play supports a baby's eye-hand coordination, provides practice tracking moving objects with their eyes, and reinforces the concepts of patterns and cause and effect relationships.
- Make bubble solution using no-tears baby shampoo to protect the baby's eyes. The link for Bubbles and Babies in the online resources section below provides a recipe.
- Use bubbles to help your toddler learn positional words - like **“up,” “down,” “under,”** and **“over.”** Turn it into a game - **“Jump and pop the bubble above your head.” “Stomp on the bubble next to your foot.”** etc.
- Experiment with different shapes during play time. Talk about spheres. A ball is sphere. Will a ball roll? A block can be a cube or rectangular prism, etc. Will a block roll?
- Play Bubble Stomping Simon Says with your child. Explain to your child that you'll be giving some directions and they need to listen carefully for the words **“Simon says.”** Tell your child only to react to requests that start with the words **“Simon says.”** For example, they should pop a bubble when they hear **“Simon says pop a bubble near your face,”** but not react when they hear **“Pop a bubble beside your shoe.”**
- Ask older children to predict how bubbles react on a hot day and how they react on a cold day. Invite them to make a hypothesis and test what conditions are actually best for bubble blowing. What other conditions might affect bubbles?
- Have your child make different bubble solutions and test which will produce the largest and longest lasting bubbles. Encourage your child to figure out how they can blow a bubble around themselves or create a bubble the size of a bike.



- Build an open-sided cube, pyramid, or rectangular prism. Dip it into bubble solution. Consider how the bubble is different than the bubbles blown with a wand.
- Build bubble blowing devices and design a variety of polyhedra frames to dunk into bubble solution. Have fun inventing!
- Learn about the science behind bubbles. Investigate what happens when you blow a bubble, learn about elasticity and surface tension, and explore why bubbles pop and how you can handle them so they're less likely to pop. Research where bubbles are found in nature and about their uses and purposes. People aren't the only living creatures that blow bubbles. Find out how whales and dolphins use bubbles!

**Extension Conversations During Daily Routines with Infants and Toddlers:**

1. Tummy time - Blow some bubbles for baby to enjoy during tummy time. Say, "I'm going to touch the bubbles. Can you touch them too?" Talk about what happens when you touch the bubbles. Talk about their shapes and sizes. Count them too.
2. Play time - Blow bubbles with your toddler. Talk about the position of the bubbles. "The bubbles are moving up. That bubble is moving toward you. The large bubble is floating down to the ground."
3. Bath time - Blow some bubbles for your toddler at bath time. Count them - "one bubble, two bubbles, lots of bubbles in the bath tub."
4. Traveling time - Talk about the shape of bubbles. What can you find that's the shape of a bubble? Have a sphere scavenger hunt.



**Spanish Title:** *Circulo! Esfera!*

**Copyright:** 2022

**ISBN:** 9781623542245

**Related Books:** *Have You Seen My Monster* by Steve Light; *Captain Invincible and the Space Shapes* by Stuart J. Murphy

[Find this book at your local library!](#)

**Extension Questions:**

1. What objects have a shape like a bubble?
2. What words could you use to describe a bubble?
3. What was different about the wands that Olivia, Mei, and Manny used to blow their bubbles? How were the wands alike?
4. Do you think it's possible to make a bubble that isn't the shape of a sphere? Why or why not?
5. What do you think would happen if you blew lots of bubbles into a container? What do you think the bubbles would do?

**Vocabulary for Building Math Concepts:**

all, ball, but, circle, different, each, heart, little, shapes, sphere, triangle

**Early Math Project Resources:**

[Bubble solution recipe](#)

[Bubble Frames](#)

[Find that Shape](#)

[Shapes on the Wall](#)

[Bubble Snakes](#)

**Online Resources:**

[Bubbles and Babies from the Colorado Department of Education and Institute of Museum and Library Services](#)

[Bubble Fun from First 5 California](#)

[Bubble Art Resource from the AIMS Center](#)

[The Bubbleologist - The Code - Episode 2 BBC](#)

[How This Woman Blows Record-Breaking Bubbles /WIRED](#)

