

Exploring Ice

Let's measure and compare! Children will explore how tall or long things are using simple tools and materials.

STEM Focus: Science — Scientific Inquiry

Experiences Your Children Will Have

- Exploring materials using their senses
- Observing changes from solid (ice) to liquid (water)

Vocabulary

- Frozen/Melt(-ed,-s): The changes between a liquid and a solid
- Temperature: How hot or cold something is.
- Liquid: A state of matter that flows and doesn't have a fixed shape
- Solid: A state of matter where something has a definite shape and size

Materials

- Tray or shallow container
- Ice cubes or larger pieces of ice
- Optional: small cups of water and/or salt

Beginning

- Tell your child, *Today we are going to explore ice! Ice is frozen water. When it gets warm, it melts back into water.*
- Give your child a piece of ice.
- Say, *I wonder how we can make it melt.*
- Invite your child to explore.

Middle

- Encourage your child to touch, move, and explore the ice.
- Use the materials alongside your child and imitate how they use them.
- Talk about what they are noticing. You might say, *It feels cold, or, It's turning into water.*
- Use the vocabulary words intentionally while interacting with your child.
- Use the specific strategies below, depending on your child's age:
 - Infants and toddlers may explore the materials by touching, holding, mouthing,

Exploring Ice

or reacting to the cold. You can support your child by describing their reactions: *That is cold!; Your hands are wet.*

- Preschoolers may explore how the ice melts by holding it in their hands or moving it back and forth on the tray. You can support your child by asking questions: *What is happening?; Why do you think it is melting?*
- School-age children may test ideas and explore changes more deeply. You can support your child by encouraging them to experiment: *What will make the ice melt faster?; What do you think will happen if we add salt or water?*

End

- As you notice your child begin to lose interest, give them a warning that you are going to put the materials away. You might say, *In a few moments we are going to clean up. You can try out one more idea with your ice.*
- Encourage your child to help you clean up the materials and put the materials away together.

Additional Learning

- Talk about or explore other things that melt (ice cream, snow, chocolate chips, crayons, butter, beeswax).
- Explore other sensory materials (water, sand, baking soda and vinegar, cornstarch and water, dirt and water).