



# COOKING DESSERTS

DAILY ROUTINE EXPLORATIONS WITH YOUR YOUNG CHILD



## ABOUT THIS ROUTINE:

Cooking is a great opportunity to support STEM learning! Talk about STEM ideas and use STEM words as you prepare food items together.

Next time you make a sweet treat, tell your child you want their help thinking through all the **steps**.

"I wonder if we can remember all the **steps** to make our dessert. Let's think about what we need to **do first, next, and last!**"

As you get ready to make your dessert, ask your child what they think needs to happen **first**. Give your child wait time to respond. Talk through the steps together, like gathering the ingredients, mixing everything together, baking or freezing, and then decorating or adding toppings. Ask your child to help you put the **steps in order** and think about why the **order matters**.

Cooking desserts is a perfect example of computational thinking! Cooking desserts work best when we follow the recipe steps in the right order. Ask your child: "What do you think **would happen** if we tried to decorate the cookies before they came out of the oven? What if we forgot to add sugar to the dough?"

Start simple! Begin with just one or two steps, like "**First** we mix the ingredients, **then** we bake them." As your child gets comfortable, work together toward three, four, or five more detailed steps.

## STEM LEARNING AREA:

**Computational Thinking:** Concepts involved in programming computers and coding.

Every child is different. Do what works best for encouraging your child's independent exploration during this suggested daily routine. 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.



# COOKING DESSERTS

ADAPTATIONS FOR DAILY ROUTINE EXPLORATIONS WITH YOUR YOUNG CHILD

## WHAT CAN I DO TO SUPPORT MY CHILD'S LEARNING?

### ACCESS TO ENVIRONMENT

- If possible, limit background noise and distractions so your child can be more engaged in the cooking activity
- Place materials within reach in a contained space for easier access
- Place an anti-slip stabilizing mat below the plates and bowls so they do not move
- Using adjustable height table or adjustable chair if your child needs sit down or rest frequently

### MATERIALS

- Have child's assistive technology ready and available, including augmentative & alternative communication (AAC) device
- For easier grasping, adapt the utensils by building up the handles or creating grip straps using household items (masking tape, pool noodles)

### INTERACTIONS OR INSTRUCTION

- Provide hand-over-hand support to help your child explore ingredients and utensils better
- Narrate or sign your child's actions as they interact and experiment with the utensils and ingredients ("Oh, you're scooping with the tablespoon!")
- Adjust the number of steps as needed.
- Use a variety of methods of communication (sign language, gestures) to meaningfully engage your child
- Use pictures or icons to signal next steps or each step of the sequence
- Communicate with your child at eye level
- Speak or sign slowly, emphasize keywords, and wait for a response
- Praise your child's efforts (to try new foods) with words, facial expression, or body language



Adaptations are simple changes you can make to your child's space, toys, or activities to help them stay engaged and learn STEM ideas and words during daily routines.

### Making Ice Cream?

- Use a container (and Velcro if needed) instead of bags
- Use mittens or towels to hold bags if child is sensitive to temperature
- Use an alternative "banana based" recipe (blended or mushed up frozen bananas) for children who may only have thickened liquids by mouth (**in consultation with feeding therapist or SLP**)



### Quick Tip:

Communication may include the use of words, signs, gestures, and different types of cues, such as touch, object, movement, or visual.

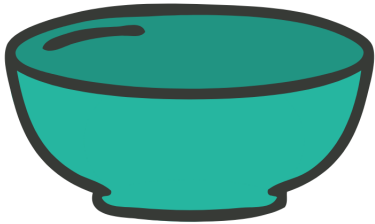




# COOKING DESSERTS

VISUAL CUES FOR DAILY ROUTINE EXPLORATIONS WITH YOUR YOUNG CHILD

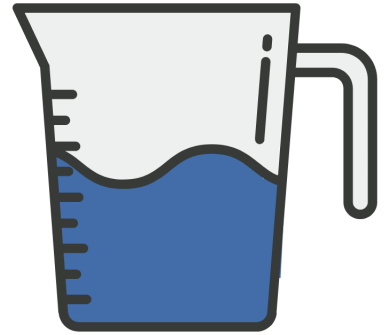
## USE TO PROMPT



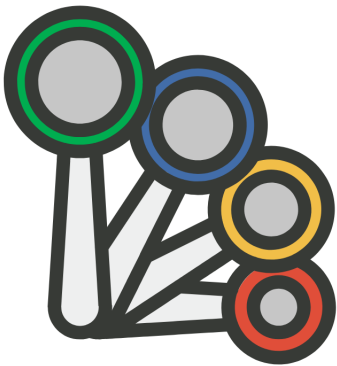
**Bowl**



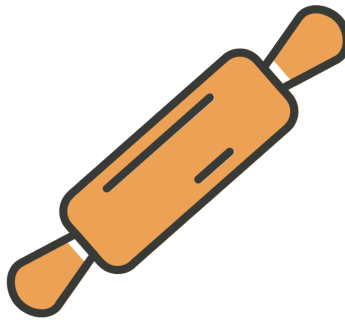
**Mix**



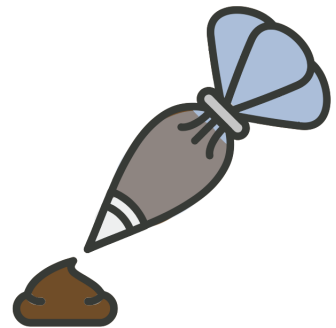
**Measuring cup**



**Measuring spoons**



**Rolling pin**



**Piping bag**



**Dough**



**Need more visual cues?**

Visit [STEMIE's Visual Cue Library](#) or check out STEMIE's tips for creating and using visual supports with [A Guide to Visual Supports](#).



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VISUAL CUES FOR DAILY ROUTINE EXPLORATIONS WITH YOUR YOUNG CHILD

## USE TO MAKE ICE CREAM



**Pick up small bag**



**Add ½ teaspoon of vanilla extract to small bag**



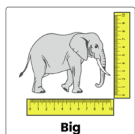
**Add 2 tablespoons of sugar to small bag**



**Add 1 cup of half & half (or non-dairy substitute) to small bag**



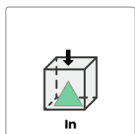
**Close small plastic bag tightly**



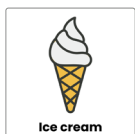
**Pick up big bag**



**Add ice and salt to big bag**



**Place the small plastic bag inside the large plastic bag and close tightly**



**Shake for 5-10 minutes. The ice cream mixture should be consistency of soft serve and be ready to eat.**



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## COOKIES

### MATERIALS

- 2  $\frac{3}{4}$  cups all-purpose flour
- 1 teaspoon baking soda
- $\frac{1}{2}$  teaspoon baking powder
- 1 cup butter, softened
- 1  $\frac{1}{2}$  cups white sugar
- 1 egg (substitute  $\frac{1}{4}$  cup of applesauce)
- 1 teaspoon vanilla extract
- Mixing spoon
- 2 bowls
- Baking sheet
- Cookie cutter(s)
- Rolling pin
- Extras (chocolate chips, sprinkles, frosting, nuts, etc..)

### DIRECTIONS

1. Preheat the oven to 375F **Adult Supervision required**
2. Mix dry ingredients (flour, baking soda, baking powder, & any extras, like chocolate chips or nuts) in one bowl
3. Stir sugar and softened butter together until smooth in another bowl (You can soften butter ahead of time by placing in a cup that has been warmed by hot water and covering. *OR* You can add it to the activity by having your child roll the butter flat with a rolling pin on wax paper.)
4. Stir in egg (or substitute) and vanilla into the sugar and butter mix
5. Gradually add the dry ingredients mix to the egg/vanilla/sugar/butter mix
6. Roll into 1-inch balls *OR* roll flat and use cookie cutters
7. Place balls/cut cookies 2 inches apart on an ungreased baking sheet
8. Bake for 8-10 minutes **Adult Supervision required**
9. Let cookies cool before adding any extras (sprinkles, frosting)
10. Enjoy!





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VISUAL CUES FOR DAILY ROUTINE EXPLORATIONS WITH YOUR YOUNG CHILD

## MANGO SAGO

### MATERIALS

- 2 large mangos
- $\frac{1}{4}$  cup of small sago pearls
- 1 cup of coconut milk
- $\frac{1}{2}$  evaporated milk (or dairy-free alternative)
- 1-2 tsp of sugar (or honey)
- Water

### DIRECTIONS

1. Cook the sago pearls **Adult Supervision required**
2. Peel and diced  $\frac{3}{4}$  of the mango **Adult Supervision required**
3. Mix cooked sago, coconut milk, evaporated milk (or dairy-free alternative), mango puree, and sugar (or honey)
4. Add diced mango
5. Refrigerate for at least 30 minutes. The texture should be soft and slightly thick.
6. Enjoy!



# COOKING DESSERTS

ACTIVITY IDEAS FOR DAILY ROUTINE EXPLORATIONS WITH YOUR YOUNG CHILD

## 1 – VOLUME MEASURER

**Description:** Help your child **measure volume** by predicting **how much** of each ingredient is needed to **fill** a measuring cup while **following the steps** of a favorite dessert recipe, like cookies, donuts, or ice cream.

### What My Child Is Learning!

Children learn best by interacting with people and objects. Introduce STEM words, ask questions, and encourage them to recognize patterns in their daily routines. Help your child make a connection between words and real-life experiences and develop fundamental critical thinking and problem-solving skills, as well as math skills.

Talk about the importance of **accurate measurements** when Cooking Desserts . "Accurate measurements of flour, sugar, and butter help our cookies turn out just right. **Too much** or **too little** of an ingredient can **change** the way our dessert **looks and tastes!**"

Ask, "**How many** tablespoons of sugar do you think will **fill** this measuring cup? Is the cup **half full** or **almost full?**" (16 tablespoons = 1 cup)

## 2 – MATTER DISTINGUISHER

**Description:** Help your child discover that ingredients can **look and feel different after baking or freezing**. While making a favorite dessert together, like cookies or ice cream, encourage your child to observe and describe how ingredients **change** as they are **heated or cooled**, and identify exactly how one **state of matter changes** into another.

### What My Child Is Learning!

Children learn best by interacting with people and objects. Introduce STEM words, ask questions, and encourage them to explore various ingredients. Help your child make a connection between words and real-life experiences and develop fundamental critical thinking and problem-solving skills.

Talk about how **states of matter can change** when cooking desserts. "The salt in the ice **lowers the temperature** around our cream mixture, making it super **cold**. As our mixture loses heat while we shake it, it begins **to freeze** and turn into ice cream! The same thing happens in the oven. The **heat changes** our **soft, wet** dough into something solid."

Ask:

"What do you think will happen to our cookie dough when it goes in the oven?"

"What about our cream mixture when we shake it in the ice?"

"If our ice cream gets runny, what could we do to make it more solid again?"



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ACTIVITY IDEAS FOR DAILY ROUTINE EXPLORATIONS WITH YOUR YOUNG CHILD

## ADDITIONAL ACTIVITY IDEAS:

- Have a conversation about what ingredients you need to make your dessert and shop for those ingredients together.
- **Build a catapult** together with the **measuring spoons** and any left-over **ice** cubes. Challenge your child to build a catapult out of **different materials** with the goal of sending the ice **further**.
- Put some of the freshly made ice cream on a cone and have your child run to a tree and back. Challenge your child to keep the scoop **balanced** but run fast enough to keep the scoop from **melting**.
- Check out these books about cookies:
  - *If You Give a Mouse a Cookie* by Laura Numeroff & Felicia Bond
  - *Who Took the Cookies from the Cookie Jar?* by Bonnie Lass & Philemon Sturges
  - *Milk and Cookies* by Frank Asch
- Check out these books about ice cream:
  - *The Ice Cream Vanishes* by Julia Sarcone-Roach
  - *Ice Cream Man: How Augustus Jackson Made a Sweet Treat Better* by Glenda Armand & Kim Freeman
  - *From Milk to Ice Cream* by Stacy Taus-Bolstad

