Aha! island

Learning Party Guide

Four learning parties introducing preschoolers and their families to computational thinking.

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Introduction

Welcome to the AHA! Island Learning Parties! Learning Parties prepare three to five-year old children for school readiness by providing hands-on, interactive experiences for parents to do with their children. They're based on the belief that parents are their child's first teacher and that learning happens through everyday interactions such as talking, reading, playing, singing, and engaging in activities together. This series of Learning Parties makes it fun for preschoolers to learn about computational thinking through videos, activities, games, and books.

What Is Computational Thinking?

Computational thinking (CT) is a creative way of thinking that enables children to identify and systematically solve problems. It is applicable to a wide range of disciplines, including math, science, engineering, and literacy. Computational thinking is not the same thing as coding or computer programming, but it is a precursor that can help preschool children learn how to solve problems in a way that could be carried out by a computer.

Computational thinking is something that can be learned at a young age, and it can be practiced in non-programming contexts (in other words, without a computer). Just like children sing the alphabet before they learn to read, or count before they learn addition and subtraction, preschoolers can practice basic CT skills through games and hands-on activities, which can set the groundwork for more complex skills later on.

There are a number of core skills behind computational thinking. AHA! Island focuses on three that are engaging and age-appropriate for preschoolers:

Create, Test, Improve!

Use a three-step process to create something new.

1. **Create:** Make something.
2. **Test:** See how well it works.
3. **Improve:** Use what you learned from testing to make it better.

Step It Out!

When you need to solve a problem or complete a task, it can help to:

1. Think about the **steps you need to do.**
2. Then do the **steps in order.**

Make It Work!

When something is not working the way you want it to, you can:

1. **Check Your Steps:** Figure out what the problem is.
2. **Make It Work:** Come up with a way to fix it.

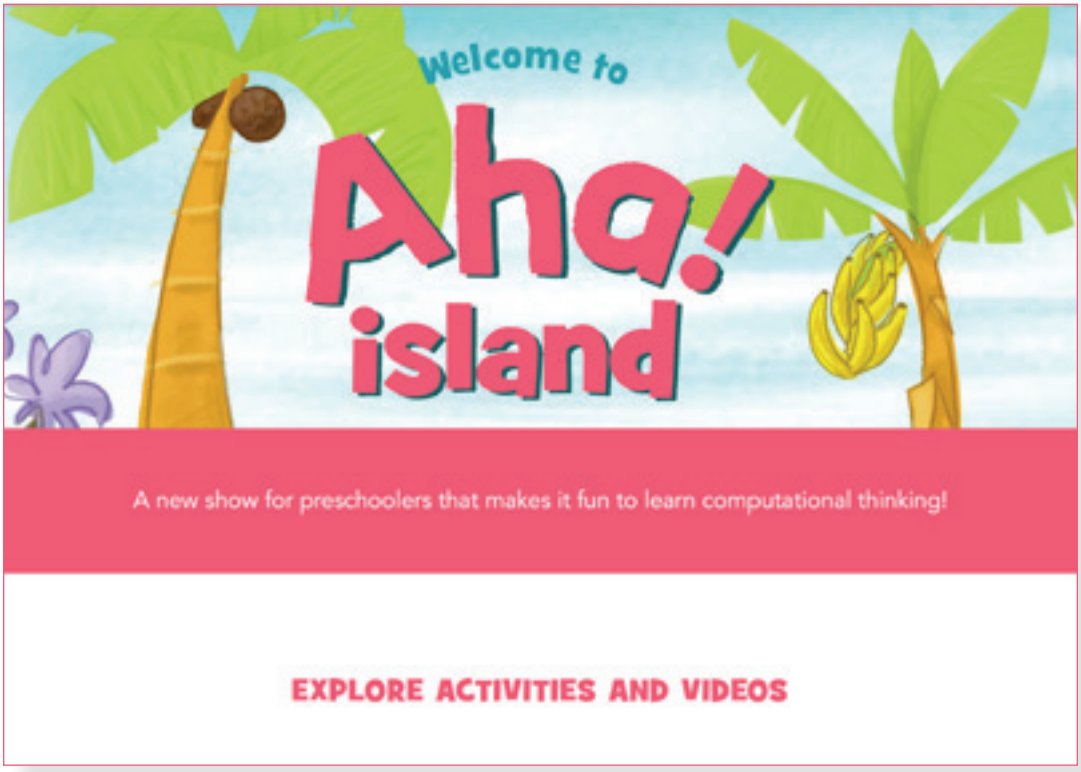
Families may not realize it, but they use these computational thinking skills every day! When parents perfect a recipe, they probably use the three-step process, **create, test, improve!** When they plan an afternoon of running errands, they **step it out**—they think about the tasks they need to complete and decide on the order to do them in. And when family members face a problem like trying to fix the TV remote, they **make it work** by figuring out what the problem is and then coming up with a solution.

Program Overview

Here's how the AHA! Island CT Learning Parties are structured:

- There are four sessions. Each is 90 minutes and most are broken up into 3 parts: Parent Skill Development, Child Play Session, and Parent-Child Activities.
- One of the three core CT skills will be introduced to families at each of the first three Learning Parties.
- The fourth Learning Party is a celebration! Families will rotate between 3 different activities, view photos from the previous sessions, watch music videos, enjoy refreshments, and receive a certificate of achievement.
- Home Connection: families receive homework assignments each week that include hands-on activities, watching videos, and reading books. They also receive books so they can start an early learning library in their home.
- Videos and copies of the activities can be downloaded from the AHA! Island website.

URL: ahaisland.org
Username: aha
Password: island



Session Overview

Each 90-minute session is broken down into three parts: Parent Skill Development, Child Play Session, and Parent-Child Activities. Here's what happens in each of them:

Parent Skill Development (45 minutes)

Parents meet with an educator.
They will:

Watch the Story

The video shows the AHA! Island characters using a computational thinking skill to solve a problem.

Do the Activity

The hands-on activity helps families practice the CT skill introduced in the video.

Review the Video and Book

The music video or live-action video reinforces the computational thinking skill, and the book ties into the theme of the activity.

Child Play Session (45 minutes)

Children meet with a caregiver
They will:

Watch the Story

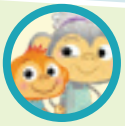
Children watch the same video that their parents watch with the educator.

Directed Child Play

Children play with different hands-on materials and informally explore the CT skill.

Read a Book

The child care provider reads a book that ties into the theme of the activity.



Parent-Child Activities (45 minutes)

Children join their parents to learn the CT skill and do the same activity that the parents just practiced. You'll reinforce the learning as families:

Watch the Story

Families re-watch the video and discuss the questions on their handout.

Do the Activity

Parents and their children do the hands-on activity together to practice the CT skill.

Watch the Video

Families watch the music or live-action video, which reinforces the computational thinking skill.

Home Connection: Families will have more opportunities to practice computational thinking skills between sessions. At the end of each Learning Party, you'll offer them additional activities, access to AHA! Island videos online, and related books to take home.

90 minutes

Create, Test, Improve!

Design a Bridge

Children and their parents or caregivers are introduced to computational thinking and what will happen over the four Learning Parties. In this first Learning Party, families will be introduced to a three-step process for making things called **create, test, improve!** In this activity, they practice these three steps as they design a bridge for a toy car to travel across.

Set Up

What You Need for the Session

Each family needs:

- Toy car(s) or wagon(s)
- Container, such as a tub or box (about 14"–18" wide) The bridges will be built across the container.
- Household items to make the bridges, such as rulers, paint sticks, construction paper, or cardboard (The items should be shorter than the containers.)
- Optional: If you're using waterproof tubs, consider providing water—it's fun for children to build their bridge over real water! (However, be prepared for spills or extra cleanup.)
- Tape, string, scissors
- *Design a Bridge* handout
- *Parent Overview: Create, Test, Improve!* handout

You'll need:

- AHA! Island PowerPoint (provided)
- An Internet-enabled computer with projector or monitor to view the following videos with families:
  - *Shivery Delivery*
  - *Create, Test, Improve!*
- Read-aloud book, *Tinyville Town Gets to Work!* by Brian Briggs
- Phone or camera to take photos

What to Send Home

Each family will need:

- Activity Handouts:
  - *Build a House*
  - *Design a Pillow*
- Books to accompany the take-home activities (if you're providing 9 books in total)
  - *A House for Birdie* by Stuart J. Murphy
  - *The Perfect Pillow* by Eric Pinder
- Book to accompany today's activity (if you're providing 15 books in total)
  - *Tinyville Town Gets to Work!* by Brian Briggs

What to Prepare Ahead of Time

1. Do the activity on your own before leading it with families.
2. Gather materials and place them in a location where families can easily access them.
3. Go to the AHA! Island website: **ahaisland.org**
   ➡ **Username: aha** ➡ **Password: island**

   Print and make copies of the following handouts for each family:
   - *Design a Bridge*
   - *Build a House*
   - *Design a Pillow*
   - *Parent Overview: Create, Test, Improve!*
4. Preview these videos on the website: *Shivery Delivery* and *Create, Test, Improve!* Set up a computer with a projector to show the videos to families.
5. Preview the PPT slides you'll be showing parents (there are three slides for this session).
6. Gather the books that you'll be sending home with families.
7. Collect the materials and set up for the Child Play Session. See the Child Play Session on pages 11–12 for more details.

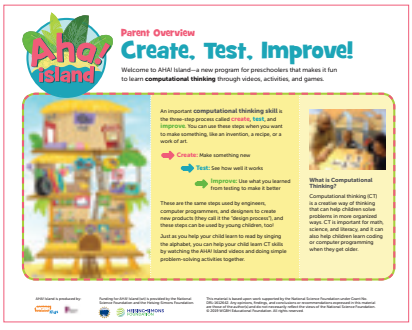
Parent Skill Development

In this 45-minute session, you'll:

- Introduce parents to AHA! Island and give them a short overview of computational thinking using the PowerPoint slides.
- Use the PowerPoint slides to talk to parents about the first CT skill: **Create, Test, Improve!**
- Guide parents through a hands-on activity and watch related videos together. This will prepare parents to do the activity and talk about the videos with their children during the Parent-Child Activity.

Greet & Share (10 minutes)

1. Welcome parents and introduce yourself. Then have parents introduce themselves and share why they wanted to participate in the CT Learning Parties.
2. Give a brief overview of AHA! Island, computational thinking, and the first CT skill. Show slide 1 of the PowerPoint and say:
   - *We are going to meet for four sessions about something called computational thinking.*
   - *Yes—"computational thinking" sure is a mouthful! But by the end of today, you'll see it's something every preschooler can learn.*
3. Show slides 2-3 and explain:
   - *Computational thinking is a creative way of thinking that can help all of us solve problems in more organized ways.*
   - *Practicing these skills now will help prepare children to be successful in school. And it can also help them learn coding and computer programming when they get older.*
   - *Just as you help your child learn to read by singing the alphabet, you can help your child learn CT by doing simple problem-solving games and activities together.*
4. Pass out Parent Overview: Create, Test, Improve! Show slide 4 and say:
   - *The first CT skill we're going to explore together is called **create, test, improve!** First you **create** something new, you **test** it out, and then you use what you learned from the testing to **improve** it. **Create, test, Improve!***


Parent Overview
Create, Test, Improve!
Welcome to AHA! Island—a new program for preschoolers that makes it fun to learn computational thinking through videos, activities, and games.
An important computational thinking skill is the three-step process called create, test, and improve. You can use these steps when you want to make something, like an invention, a recipe, or a work of art.
Create: Make something new
Test: See how well it works
Improve: Use what you learned from testing to make it better
These are the same steps used by engineers, computer programmers, and designers to create new products (they call it the "design process"), and these steps can be used by young children, too!
Just as you help your child learn to read by singing the alphabet, you can help your child learn CT skills by watching the AHA! Island videos and doing simple problem-solving activities together.
What is Computational Thinking?
Computational thinking (CT) is a creative way of thinking that can help children solve problems in more organized ways. CT is important for math, science, and literacy, and it can also help children learn coding or computer programming when they get older.

5. Show slide 5 of the PowerPoint and explain what will happen during each session:
   - *For the first 45 minutes of each Party, we will meet separately from your children. Your children will spend time with a child care provider: watching an AHA! Island video, having some play time, and listening to a story.*

- *Meanwhile, we'll focus on learning a specific CT skill. We'll watch a video, do a hands-on activity, and discuss how to lead the activity with your children. This will give you practice so that when your children join us, you can guide them through the same activity.*
- *For the last 45 minutes, your children will join us. You'll re-watch the video with your child and discuss it. Then you'll do the same hands-on activity and receive more activities so you can practice at home.*

Watch the Story (13 minutes)

1. Pass out the *Design a Bridge* handout. Explain:

- *The handout walks you, step-by-step, through all parts of the activity.*
- *In each activity, you'll watch a video, do a hands-on activity, see a music video, and read a book.*

2. Introduce the video. Say:

- *Let's get started by watching a video about a family of monkeys and their animal friends who all live on AHA! Island.*
- *In this video, the monkeys use the three-step process,* ***create, test, improve,*** *to make a tray that can hold many ice cream cones.*

3. Show the video: *Shivery Delivery* (7:21)

4. Ask parents:

- *What are some things the monkeys thought of using to create the ice cream tray? (aluminum foil, fabric, paper, wood)*
- *What did they find out when they tested them? (The ice cream cones wouldn't stand up. Some things were too weak or floppy, like the foil, fabric, and paper. The wood was strong, but they couldn't poke holes in it.)*
- *How did they improve their tray? (They made a new tray out of cardboard. They could poke holes in the cardboard, and it was sturdy.)*

5. Tell parents:

- *When you watch the videos at home, sit with your children and watch together. Then, ask questions to help them understand what they're seeing and connect it to their daily lives.*
- *Talking together with your children while watching makes a big difference! It builds their vocabulary and helps strengthen their ability to listen, think, and communicate.*
- *Your handout has questions that you can ask, but you can come up with your own questions too.*


Create. Test. Improve!

Design a Bridge

When you want to make something, you can use a three-step process: **create, test, improve!** This **computational thinking skill** is a creative way of thinking that can help children solve problems in more organized ways. Try the ideas below to practice this skill with your child.

Total time needed: 20–30 minutes

Watch the Story

Shivery Delivery

Ask your child:

- What are some things the monkeys thought of using to **create** the ice cream tray? Why didn't they work?
- How did they **improve** their tray?
- Have you ever had more things than you could carry? What happened?

Do the Activity

Design a Bridge

Follow the directions on the next page to design a bridge. You'll need:

- A toy car or wagon
- Sink, tub, or container
- Water (optional)
- Household items such as rulers, paint sticks, or cardboard (the items should be shorter than the sink or container)
- Tape, string, scissors

Watch the Music Video

Create, Test, Improve!

Watch the monkeys sing as they **create** a go-cart, **test** it out, and then **improve** it. They use the same steps that you used when you designed your bridge!

Read a Book (Optional)

Tinyville Town Gets to Work

by Brian Biggs

Ask your child:

- Why did the new bridge need to be wider and stronger than the old bridge?
- If you were building a bridge, which job would you like to have? Why?

For AHA! Island videos and activities, visit: ahaisland.org Username: aha Password: island

Do the Activity (15 minutes)

1. Tell parents:

- *Let's do an activity using the same three steps the monkeys used:* ***create, test, improve!*** *You're going to* ***create*** *a bridge for a toy car to drive on,* ***test*** *it to see how it works, and then* ***improve*** *it.*
- *You'll do this same activity when your children join us later on.*

TIP: The Parents' Role

When parents do the activity with their children, encourage them to help out, but let their child make most decisions and build most of the bridge. Playing a supporting role allows their child to gain experience and build confidence in solving problems!

2. Have parents go to the second page of the *Design a Bridge* handout. Parents should work in pairs, following the directions to **create, test,** and **improve** their bridge. Have one parent direct the activity; have the other parent play the child.

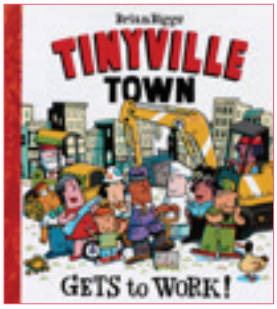
3. When parents are done building their bridges, discuss the activity as a group. Ask:

- *How did you* ***create*** *your bridge?*
- *Why was it important to* ***test*** *it?*
- *What did you learn from* ***testing*** *that helped you improve your bridge?*

Review the Music Video and Book on the Activity Sheet (2 minutes)

1. Direct parents to the first page of the activity sheet and point out *Watch the Music Video* and *Read a Book*.

- **Music Video:** Tell parents that you won't be watching the music video until the children arrive for the Parent-Child Activities. The video is called *Create, Test, Improve!* and shows the AHA! island characters using the same three steps.
- **Book:** Tell parents that the child care provider is reading this book to the children right now. The book is *Tinyville Town Gets to Work*! and it relates to the bridge activity.



2. Explain that parents will be receiving additional activity handouts at the end of the session so they can practice more at home. When they do the activities, they can also watch the related videos and read the books.

Wrap Up (5 minutes)

1. Review and discuss the session. Tell parents:

- *Let's talk about the CT skill we've been practicing. Who can tell me the three steps? How did you use them when you did today's activity?*
- *Your children will join us in a few minutes, and you'll have the opportunity to do the same activity with them, using the activity handout as a guide.*
- *Does anyone have any final questions about doing the activity with your child?*

2. Transition to the Parent-Child Activities. Parents can take a quick break and greet their children as they enter the room and sit together.

Child Play Session

In this 45-minute session, children will:

- Meet with a child care provider while their parents meet with an educator.
- Watch an AHA! Island video, choose between activity stations, and listen to a story.

Preparing for the Session

website: **ahaisland.org**
➡ **Username: aha**
➡ **Password: island**

1. Set out a child sign-in sheet and provide name tags.
2. Go to the AHA! Island website and log in.
3. Attach a projector to the computer, if needed.
4. Gather the materials for Directed Child Play and set up stations. During this free play session, children will create and build.
   - **Station #1:** Set out building blocks, Legos, marble mazes, a train set, or other materials that children can build with.
   - **Station #2:** Set out a variety of art supplies such as paper, crayons, scissors, tape, string, beads, or modeling dough.

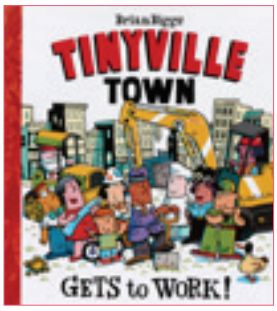
Watch a Video (10 minutes)

1. Have children gather around the computer, or if the group is large, set up a computer with projector to show the video.
2. Show the video: *Shivery Delivery*. Tell children:
   - *Let's watch a video about a family of monkeys and their animal friends. They need to figure out a way to carry seven ice cream cones all at once.*

Directed Child Play (25 minutes)

1. Tell children that it's now their turn to create something, just like the monkeys did in the video.
2. Show children the activity stations and explain what to do at each one. At both stations, encourage children to create or build something.
3. After 20 minutes tell children to clean up their materials. Then invite them to join you for a story.

Read a Book (10 minutes)



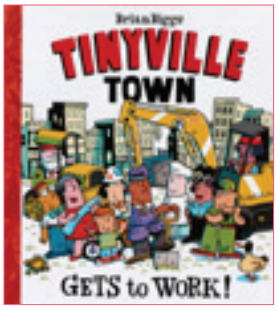
1. Read *Tinyville Town Gets to Work!* by Brian Biggs.
2. Then ask the children:
   - *Why does the new bridge need to be wider and stronger than the old bridge?*
   - *If you were building a bridge, which job would you like to have? Why?*
3. Tell the children that they will now join their parents to do an activity. Thank them for coming and walk them to meet their parents.

Parent-Child Activities

In this 45-minute session, you'll:

- Support parents as they repeat the activity with their children.
- Reinforce the CT skill as families work together.
- Distribute handouts and resources so families can practice more at home.

Greet & Share (2 minutes)



1. Welcome children and introduce yourself. Hold up *Tinyville Town Gets to Work!* and say:
   - *Raise your hand if you know this book. Can anyone tell me what happens in the book?*
   - *Today we're going to create our own bridges, just like Tinyville Town.*

Watch the Story (13 minutes)

1. Introduce the video. Tell families:
   - *First, we're going to watch the video we saw earlier together.*
   - *Let's watch the characters create a way to make an ice cream tray that can carry seven ice cream cones at the same time!*
2. Show the video: *Shivery Delivery*
3. Have parents use their *Design a Bridge* handout to ask and discuss the questions with their children.
4. Finish by saying:
   - *The monkeys used the three-step process called **create, test, improve** when they created their ice-cream tray. First, they **created** a tray, but when they **tested** it out, the cones fell on the floor! Then they **improved** the tray, and after a couple of tries, they created an ice cream tray that worked!*

Do the Activity (20 minutes)

1. Say: *Now we're going to build our bridges!*
2. Direct parents to the second page of the handout to do the activity with their child.

3. Tell families:
   - *When we build our bridges, we're going to use the same three-step process the monkeys used called **create, test, improve.** When you want to make something, you can use three steps. First you **create** something new, then you **test** it out, and then you use what you learned to **improve** it. Let's try it!*

4. As families build their bridges, circulate and ask questions that encourage children to explain their design or make improvements, such as:
   - *Tell me how you **created** your bridge.*
   - *How can you **test** it to see if it's strong enough?*
   - *Can you think of ways to **improve** your bridge?*

5. Take photos of families working on their bridges. (You'll show them during Learning Party 4, the celebration.)

Watch the Music Video
(5 minutes)

1. Tell families:
   - *The AHA! Island characters have a song that helps us remember how to **create, test,** and **improve**.*

2. Show the video: *Create, Test, Improve!*

Wrap-Up (5 minutes)

1. Review the session. Tell families:
   - *Today we practiced **creating** bridges, **testing** them out, and **improving** them. You can use the same three steps to make almost anything!*
   - *Before our next Learning Party, I'd like you to practice the three steps by doing a couple of activities at home. You can build a house, design a pillow, or do both! You'll use things that you can easily find around your home.*
   - *When you're done, take pictures of the things you create, email them to me, and we'll share them at the last Learning Party.*

2. Distribute the handouts:
   - *Build a House*
   - *Design a Pillow*

3. Give instructions about the take-home activities:
   - Explain to parents that the activity handouts are like the one they used today—they list the videos they should watch, give instructions to do the activity, and recommend a book to read.
   - Suggest that parents do one or both of the take-home activities.

- Pull up the website on your computer or projector and show parents how to log into the website and find the videos. If parents have a computer or a smart phone, they can watch the videos with their children when they do the activity at home.
- Explain that if parents are unable to access the web to watch the videos, they can still do the activities and read the books.

4. If you're providing 9 books in total (to accompany the take-home activities), distribute:

- *A House for Birdie* by Stuart J. Murphy
- *The Perfect Pillow* by Eric Pinder

If you're providing 15 books in total (to accompany all the activities), also distribute *Tinyville Town Gets to Work!* by Brian Briggs

90 minutes

Step It Out!

Teach the Robot

Children and their parents or caregivers learn a new CT skill called **step it out!** When you **step it out** it means you think about the steps needed to do a task and then doing them in order. In this activity, they practice **stepping it out** by teaching a "robot" how to put on a jacket.

Set Up

What You Need for the Session

Each family needs:

- An adult-sized jacket or a button-down shirt
- Scissors
- Robot mask (if possible, print mask on colored construction paper)
- String or pipe cleaners to attach the mask (consider assembling the masks before the session)
- *Teach the Robot* handout
- *Parent Overview: Step It Out!* handout

You'll need:

- AHA! Island PowerPoint (provided)
- An Internet-enabled computer with projector or monitor to view the following videos with families:
  - –*Playing Around with a Robot*
  - –*To Win the Prize, Be Wise*
- Read-aloud book, *Pete the Cat: Robo-Pete* by James Dean
- Phone or camera to take photos

What to Send Home

Each family will need:

- Activity Handouts:
  - –*Mixed-Up Dress Up*
  - –*Find Me!*
- Books to accompany the take-home activities (if you're providing 9 books in total)
  - –*Ella Sarah Gets Dressed* by Margaret Chodos-Irvine
  - –*Henry's Map* by David Elliott
- Book to accompany today's activity (if you're providing 15 books in total)
  - –*Pete the Cat: Robo-Pete* by James Dean

What to Prepare Ahead of Time

1. Do the activity on your own before leading it with families.
2. Gather materials and place them in a location where families can easily access them.
3. Go to the AHA! Island website: **ahaisland.org**
   ➡ **Username: aha** ➡ **Password: island**

Print and make copies of the following handouts for each family:

- *Teach the Robot*
- *Mixed-Up Dress Up*
- *Find Me!*
- *Parent Overview: Step It Out!*

4. Preview these videos on the website: *Playing Around with a Robot* and *To Win the Prize, Be Wise*. Set up a computer with a projector to show the videos to families.
5. Gather the books that you'll be sending home with families.
6. Collect the materials and set up for the Child Play Session. See the accompanying Child Play Session on pages 21–22 for more details.

Parent Skill Development

In this 45-minute session, you'll

- Use the PowerPoint slides to introduce parents to a new computational thinking skill: **Step it Out!**
- Guide parents through a hands-on activity and watch related videos together—this will prepare parents to do the activity and talk about the videos with their children during the Parent-Child Activities.

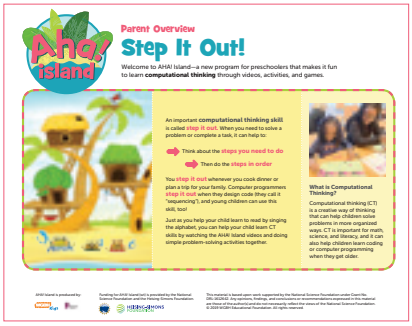
Greet & Share (10 minutes)

1. Welcome parents back for another Learning Party. Then say:

- *Raise your hand if you were able to Build a House or Design a Pillow at home with your children. How did it go?*
- *If you haven't emailed me photos of your at-home experiences, please do so. I'd like to include your photos in our final celebration.*

2. Pass out the *Parent Overview: Step It Out* handout and introduce the second CT skill. If you're using the accompanying PowerPoint slides, show slide 6. Say:

- *The next CT skill we're going to explore together is called **step it out**! When you need to solve a problem or complete a task, it can help to think about the steps you will need to do and then do the steps in order.*
- *You **step it out** every time you cook dinner or plan a trip.*


Parent Overview

Step It Out!

Welcome to AHA! Island—a new program for preschoolers that makes it fun to learn **computational thinking** through videos, activities, and games.

An important **computational thinking skill** is called **step it out**. When you need to solve a problem or complete a task, it can help to:

Think about the **steps you need to do**

Then do the **steps in order**

You **step it out** whenever you cook dinner or plan a trip for your family. Computer programmers **step it out** when they design code (they call it "sequencing"), and young children can use this skill, too!

Just as you help your child learn to read by singing the alphabet, you can help your child learn CT skills by watching the AHA! Island videos and doing simple problem-solving activities together.

What is Computational Thinking?

Computational thinking (CT) is a creative way of thinking that can help children solve problems in more organized ways. CT is connected to math, science, and literacy, and it can also help children learn coding or computer programming when they get older.

Watch the Video (8 minutes)

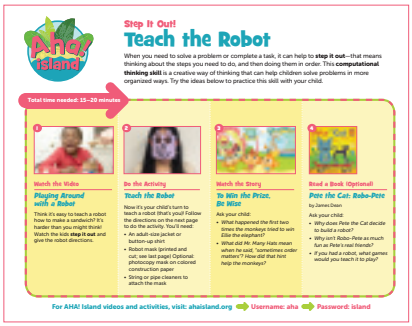
1. Pass out the *Teach the Robot* handout and introduce the video. Say:

- *Let's watch a video that shows real kids trying to teach a robot (one of the girls' fathers) how to make a sandwich.*

2. Show the video: *Playing Around with a Robot* (1:56)

3. Tell parents:

- *When you watch the videos at home, sit with your children and watch together. Talking with your children while watching makes a big difference! It builds their vocabulary and helps strengthen their ability to listen, think, and communicate.*


Step It Out!

Teach the Robot

When you need to solve a problem or complete a task, it can help to **step it out**—that means thinking about the steps you need to do, and then doing them in order. This **computational thinking skill** is a creative way of thinking that can help children solve problems in more organized ways. Try the ideas below to practice this skill with your child.

Total time needed: 15–20 minutes

1 Watch the Video

Playing Around with a Robot

Think it's easy to teach a robot how to make a sandwich? It's harder than you might think! Watch the kids **step it out** and give the robot directions.

2 Be the Activity

Teach the Robot

Now it's your child's turn to teach a robot (that's you)! Follow the directions on the next page to do the activity. You'll need:

- An adult-size jacket or button-up shirt
- Robot mask (printed and cut; see last page) Optional: Crayons or markers (colored construction paper)
- String or pipe cleaners to attach the mask

3 Watch the Story

Te Win the Prize, Be Wise

Ask your child:

- *What happened the first two times the monkeys tried to win Ellie the elephant?*
- *What did Mr. Many Hats mean when he said, "sometimes order matters"? How did that hint help the monkeys?*

4 Read a Book (Optional)

Pete the Cat: Robo-Pete

by James Dean

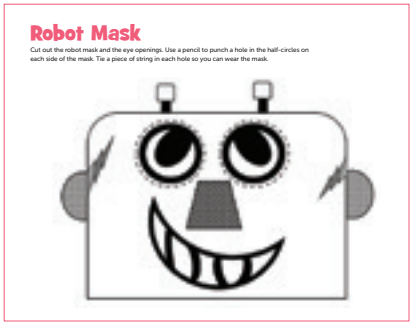
Ask your child:

- *Why does Pete the Cat decide to build a robot?*
- *Why isn't Robo-Pete as much fun as Pete's real friends?*
- *If you had a robot, what games would you teach it to play?*

For AHA! Island videos and activities, visit: ahaisland.org Username: aha Password: island

Do the Activity (20 minutes)

1. Tell parents:
   - *Let's do an activity like the one we saw the kids do in the video. You'll teach a robot how to put on a jacket by* ***stepping it out.*** *That means you'll have to think about each step to tell the robot and make sure you are saying the steps in the right order.*
   - *You'll need to pair up so that one of you is the robot and the other person is the teacher.*
   - *You'll do this same activity when your children join us later on.*



2. Have parents go to the third page of their *Teach a Robot* handout to cut out and assemble the mask. (If you assembled the masks already, give one to each parent.) Then have them go to page 2 and do the activity.
3. When parents have finished teaching their robots, discuss the activity as a group. Ask:
   - *Was it easy or hard to give directions to the robot? Why?*
   - *Robots, what problems did you have when you tried to follow the directions?*

TIP: Acting like a robot

As you work with the parents, help them think about how the activity will work with their children. Tell parents that they should follow their child's steps, exactly as they are told. When the robot misunderstands a step, the child learns that steps need to be broken down into very small and specific chunks. They'll also learn that's it's important to tell the robot the steps in the right order—just like a computer programmer does when programing a real robot! The fun happens when the parent robot follows the child's exact commands and puts the jacket on in unexpected ways!

Review the Video and Book on the Activity Sheet (2 minutes)

1. Direct parents to the first page of the activity handout and point out *Watch the Video* and *Read a Book.*
   - **Story Video:** Tell parents that they won't be watching the story video until the children arrive for the Parent-Child Activities. The video is called *To Win the Prize, Be Wise* and shows the AHA! island characters **stepping it out** to solve a problem.

- **Book:** Tell parents that the child care provider is reading this book to the children right now. The book is *Pete the Cat: Robo-Pete* and it relates to the robot activity.

2. Explain that parents will be receiving additional activity handouts at the end of the session so they can practice more at home. When they do the activities, they can also watch the related videos and read the books.

Wrap Up (5 minutes)

1. Review and discuss the session. Tell parents:
   - *Let's talk about the CT skill we've been practicing. Who can tell me what it means to **step it out**? How did you **step it out** when you did today's activity?*
   - *Your children will join us in a few minutes, and you'll have the opportunity to do the same activity with them, using the activity handout as a guide.*
   - *Does anyone have any final questions about doing the activity with their children?*
2. Transition to the Parent-Child Activities. Parents can take a quick break and greet their children as they enter the room and sit together.

Child Play Session

In this 45-minute session, children will:

- Meet with a child care provider while their parents meet with an educator.
- Watch an AHA! Island video, choose between activity stations, and listen to a story.

Preparing for the Session

website: **ahaisland.org**
➡ **Username: aha**
➡ **Password: island**

1. Set out a child sign-in sheet and provide name tags.
2. Go to the AHA! Island website and log in.
3. Attach a projector to the computer, if needed.
4. Gather the materials for Directed Child Play and set up stations. During this session, children will practice putting things in order.
   - **Station #1:** Set out magnetic alphabet letters or numbers.
   - **Station #2:** Set out wooden blocks.

Watch a Video (10 minutes)

1. Have children gather around the computer, or if the group is large, set up a computer with projector to show the video.
2. Show the video: *To Win the Prize, Be Wise.* Tell children:
   - *Let's watch a video that shows how the AHA! Island monkeys try to win a prize at the fair.*

Directed Child Play (25 minutes)

1. Tell children:
   - *Now it's your turn to put things in order, just like the monkeys did in the video.*
   - *Show children the activity stations and explain what to do at each one.*
     – At Station #1, encourage children to put the letters or numbers in order.
     – At Station #2, tell children to build 3 towers using the blocks—a small, medium, and large. They should build the towers in order from smallest to largest.
2. Let children explore the stations for 20 minutes. Then have them clean up their materials and invite them to join you for a story.

Read a Book (10 minutes)

1. Read *Pete the Cat: Robo-Pete* by Brian Biggs.
2. Then ask the children:
   - *Why does Pete the Cat decide to build a robot?*
   - *Why does Robo-Pete turn out not to be as much fun as Pete's real friends?*
   - *If you had a robot, what games would you teach it to play?*
3. Tell the children that they will now join their parents to do an activity. Thank them for coming and walk them to meet their parents.

Parent-Child Activities

In this 45-minute session, you'll:

- Support parents as they repeat the activity with their children.
- Reinforce the CT skill as families work together.
- Distribute handouts and resources so families can practice more at home.

Greet & Share (2 minutes)

1. Welcome the children back for another session. Hold up *Pete the Cat: Robo-Pete* and say:
   - *Raise your hand if you know this book. Can anyone tell me what happens in the book?*
   - *Today we're going to play around with our own pretend robots, just like Pete the Cat. When we tell our robots what to do, we're going to learn a skill called* ***step it out****!*

Watch the Video (5 minutes)

1. Introduce the video. Tell families:
   - *Let's watch a video that shows real kids trying to teach a robot (one of the girls' fathers) how to make a sandwich.*
2. Show the video: *Playing Around with a Robot*
3. Ask children:
   - *What happened when the children tried to tell the robot how to make a sandwich?*
   - *Why didn't the robot understand?*

Do the Activity (20 minutes)

1. Say:
   - *Now you'll teach a robot how to put on a jacket by* ***stepping it out.*** *That means you'll have to think about each step to tell the robot and make sure you are saying the steps in the right order.*
   - *Parents will be the robots; kids will be the teachers.*
2. Have families go to the third page to cut out and assemble the mask. (If you assembled the masks already, give one to each parent.) Then have them go to page 2 and do the activity.

3. Circulate and ask questions that encourage children to explain their thinking as they **step it out,** such as:
   - *What are the steps you take to put on a jacket?*
   - *What should the robot do first? Second?*
   - *How can you make the steps really clear, so the robot knows what to do?*
4. Take photos of children teaching the robot. (You'll show them during Learning Party 4, the celebration.)
5. When all the robots are wearing their jackets, discuss the activity as a group. Ask the children:
   - *Was it easy or hard to teach the robot? Why?*
   - *What problems did you have? How did you solve them?*

Watch the Story (13 minutes)

1. Tell families:
   - *The AHA! Island monkeys do the same thinking and planning that we did to teach our robot. Let's watch a video that shows how they **step it out** when they try to win a prize at the fair!*
2. Show the video: *To Win the Prize, Be Wise*
3. Have parents use their *Teach the Robot* handout to ask and discuss the questions with their children.

Wrap-Up (5 minutes)

1. Review the session. Tell families:
   - *Today we practiced **stepping it out** to teach a robot to put on a jacket. But you can use **step it out** to solve lots of problems!*
   - *Before our next Learning Party, I'd like you to practice the three steps by doing a few activities at home. You can make snacks using different shapes, you can play a dress-up game, or you can do both. You'll use things that you can easily find around your home.*
   - *When you're done, take pictures of the things you create, email them to me, and we'll share them at the last Learning Party.*
2. Distribute the handouts:
   - *Mixed-Up Dress Up*
   - *Find Me!*

3. Give instructions about the take-home activities:

website: **ahaisland.org**
➡ **Username: aha**
➡ **Password: island**

- *Suggest that parents do one or both of the take-home activities.*
- *Remind parents that they can go the website to watch the videos when they do the activity at home.*
- *Explain that if parents are unable to access the web to watch the videos, they can still do the activities and read the books.*

4. If you're providing 9 books in total (to accompany the take-home activities), distribute:

- *Ella Sarah Gets Dressed* by Margaret Chodos-Irvine
- *Henry's Map* by David Elliott

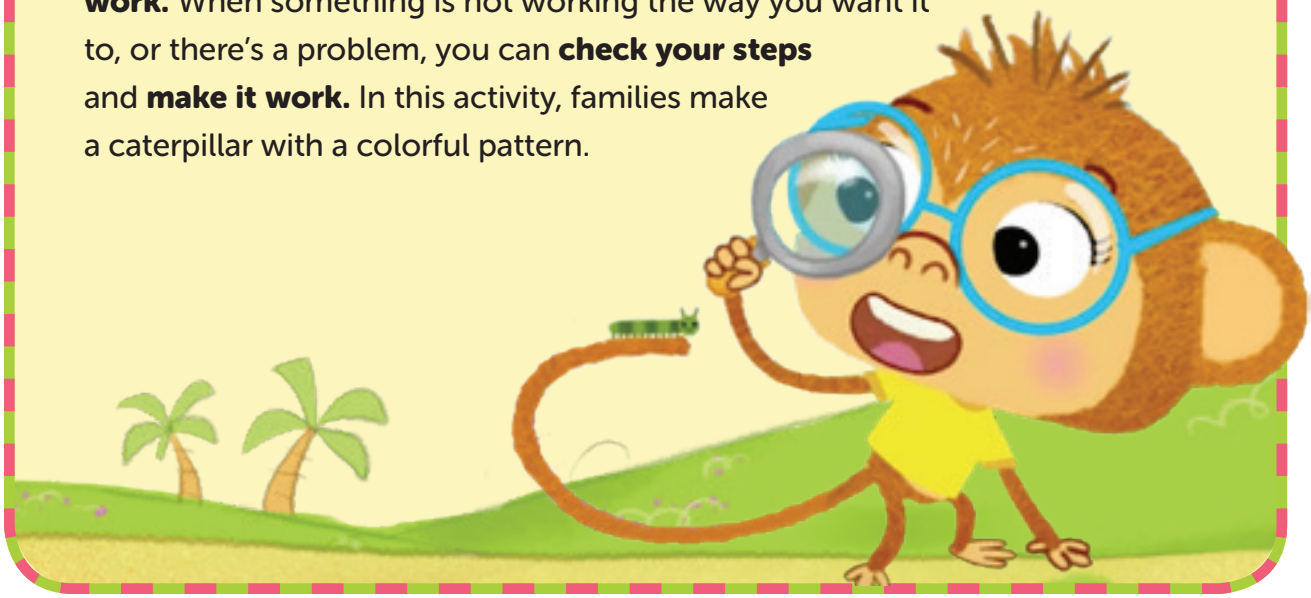
If you're providing 15 books in total (to accompany all the activities), also distribute *Pete the Cat: Robo-Pete* by James Dean

90 minutes

Make It Work!

Create a Colorful Caterpillar

Children and their parents or caregivers learn a new CT skill called **make it work.** When something is not working the way you want it to, or there's a problem, you can **check your steps** and **make it work.** In this activity, families make a caterpillar with a colorful pattern.



Set Up

What You Need for the Session

Each family needs:

- Modeling dough or clay (2-3 different colors)
- Paper or paper plates
- *Create a Colorful Caterpillar* handout
- *Parent Overview: Make It Work!* handout

You'll need:

- AHA! Island PowerPoint (provided)
- An Internet-enabled computer with projector or monitor to view the following videos with families:
  - –*Going Bananas with Lemonade*
  - –*Playing Around with Paint*
- Read-aloud book, *Teddy Bear Patterns* by Barbara Barbieri McGrath
- Phone or camera to take photos

What to Send Home

Each family will need:

- Activity Handouts:
  - –*Set the Table*
  - –*Make Goody Bags*
- Books to accompany the take-home activities (if you're providing 9 books in total)
  - –*The Little Kids' Table* by Mary Ann McCabe Riehle
  - –*The Cookie Fiasco* by Dan Santat
- Book to accompany today's activity (if you're providing 15 books in total)
  - –*Teddy Bear Patterns* by Barbara Barbieri McGrath

What to Prepare Ahead of Time

1. Do the activity on your own before leading it with families.
2. Gather materials and place them in a location where families can easily access them.
3. Go to the AHA! Island website: **ahaisland.org**
   ➡ **Username: aha** ➡ **Password: island**

Print and make copies of the following handouts for each family:

- *Create a Colorful Caterpillar*
- *Set the Table*
- *Make Goody Bags*
- *Parent Overview: Make It Work!*

4. Preview these videos on the website: *Going Bananas with Lemonade* and *Playing Around with Paint*. Set up a computer with a projector to show the videos to families.
5. Preview the PPT slides you'll be showing parents (there's one slide for this session)
6. Gather the books that you'll be sending home with families.
7. Collect the materials and set up for the Child Play Session. See the accompanying Child Play Session on pages 31–32 for more details.

Parent Skill Development

In this 45-minute session, you'll:

- Use the PowerPoint slides to introduce parents to a new computational thinking skill: **Make It Work!**
- Guide parents through a hands-on activity and watch related videos together—this will prepare parents to do the activity and talk about the videos with their children during the Parent-Child Activities.

Greet & Share (10 minutes)

1. Welcome parents back for another Learning Party. Then say:

- *Raise your hand if you were able to play Mixed-Up Dress Up or Find Me! at home with your children. How did it go?*
- *If you haven't emailed me photos of your at-home experiences, please do so. I'd like to include your photos in our final celebration.*

2 Pass out the *Parent Overview: Make it Work!* and introduce the third CT skill. If you're using the accompanying PowerPoint slides, show slide 7. Say:


Make It Work!
Create a Colorful Caterpillar
When something is not working the way you want it to, you can **check your steps** and **make it work!** This **computational thinking skill** is a creative way of thinking that can help children solve problems in more organized ways. Try the ideas below to practice these skills with your child.
Total time needed: 20–30 minutes
Watch the Story
Going Bananas with Lemonade
Ask your child:
• How did the monkeys' lemonade turn out the first time they made it? What was the problem?
• What did they do to **make it work**?
• Have you ever made your own lemonade, juice, or chocolate milk? How did it turn out?
Do the Activity
Create a Colorful Caterpillar
Follow the directions on the next page to do the activity.
You'll need:
• Modeling dough or clay
• Paper or a paper plate
Watch the Video
Playing Around with Paint
The kids want to paint their playhouse so it matches their real house. But matching the color isn't as easy as they think. They need to **check their steps** to find the problem and **make it work** by coming up with a way to fix it.
Read a Book (Optional)
Teddy Bear Patterns
by Barbara Barbieri McGrath
Ask your child:
• Let's say the first pattern on the cover out loud! blue, yellow, yellow; blue, yellow, yellow; blue, yellow. What color should come next in the pattern?
• If you made a Teddy Bear pattern, how many colors would you use and what pattern you would make?
For AHA! Island videos and activities, visit: ahaisland.org Username: aha Password: island

- *The next CT skill we're going to explore together is called **make it work.** When something is not working the way you want it to, you can **check your steps** to figure out what the problem is and then make it work by coming up with a way to fix it.*
- *You check your steps and make it work every time you search for lost car keys or try to get your TV remote to work.*

Watch the Story (13 minutes)

1. Pass out the *Create a Colorful Caterpillar* handout and introduce the video. Say:

- *Let's watch a video about the monkeys and their friends. In this video, the monkeys try to make lemonade, but it doesn't turn out quite right.*

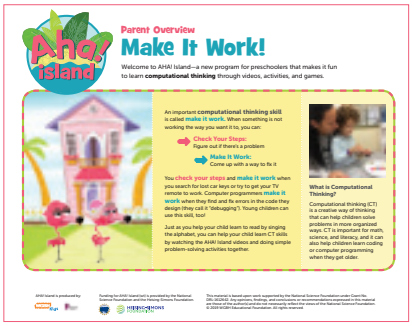
2. Show the video: *Going Bananas with Lemonade* (7:44)

3. Ask parents:

- *How did the monkeys' lemonade turn out the first time they tried it? How did they know? (It was sour. Mrs. Flamingo did not look happy she tried it.)*
- *What did they do to **make it work**? (They checked their steps to figure out what the problem was. Then they added sugar to make it taste better.)*

4. Tell parents:

- *When you watch the videos at home, sit with your children and watch together. Then, ask questions to help them understand what they're seeing and connect it to their daily lives.*
- *Talking together with your children while watching makes a big difference! It builds their vocabulary and helps strengthen their ability to listen, think, and communicate.*
- *Your handout has questions that you can ask, but you can come up with your own questions too.*


Parent Overview
Make It Work!
Welcome to AHA! Island—a new program for preschoolers that makes it fun to learn computational thinking through videos, activities, and games.
An important computational thinking skill is called make it work. When something is not working the way you want it to, you can:
Check Your Steps: Figure out if there's a problem
Make It Work: Come up with a way to fix it
You check your steps and make it work when you search for lost car keys or try to get your TV remote to work. Computer programmers make it work when they find and fix errors in the code they design (they call it "debugging"). Young children can use this skill, too!
Just as you help your child learn to read by singing the alphabet, you can help your child learn CT skills by watching the AHA! Island videos and doing simple problem-solving activities together.
What is Computational Thinking?
Computational thinking (CT) is a creative way of thinking that can help children solve problems in more organized ways. CT is important for math, science, and literacy, and it can also help children learn coding or computer programming when they get older.

Do the Activity (15 minutes)

1. Tell parents:

- *Let's do an activity. You'll have a chance to make a caterpillar with a colorful pattern. Then you'll **check your steps** to make sure the pattern is correct, just like the monkeys checked their steps after making lemonade. If there are any mistakes, you'll **make it work**.*
- *You'll do this same activity when your children join us later on.*

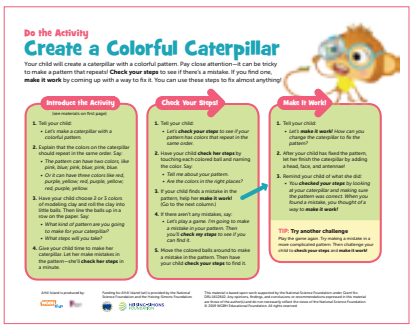
2 Have parents go to the second page of the *Create a Colorful Caterpillar* handout. Parents should work in pairs, following the directions to do the activity. Have one parent direct the activity; have the other parent play the child.

3. When parents are done making their caterpillars, discuss the activity as a group. Ask:

- *Did your "child" make a mistake in the pattern? How were you able to help your "child" check his/her steps?*
- *Did anyone play the game where the parent introduced a mistake that the child has to find? How did you help your "child" make it work?*

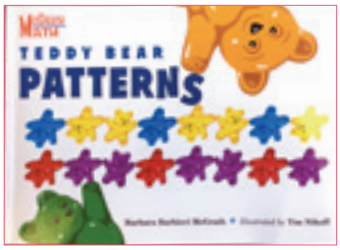
TIP: It's okay to make mistakes

With *Make It Work!* activities, parents tend to point out their children's mistakes as soon as they make them. But it's better for children to discover their own mistakes! The goal of the *Make It Work!* activities is to help children learn to correct themselves. Tell parents that it's good CT practice to let children **check their steps** to see if they can find a problem. Then they can figure out how to **make it work**.


Do the Activity
Create a Colorful Caterpillar
Your child will create a caterpillar with a colorful pattern. Pay close attention—it can be tricky to make a pattern that repeats! Check your steps to see if there's a mistake. If you find one, make it work by coming up with a way to fix it. You can use these steps to fix almost anything!
Introduce the Activity
Check Your Steps!
Make It Work!

Review the Video and Book on the Activity Sheet (2 minutes)

1. Direct parents to the first page of the activity sheet and point out *Watch the Video* and *Read a Book*.
   - **Live-Action Video:** Tell parents that you won't be watching the video until the children arrive for the Parent-Child Activities. The video is called *Playing Around with Paint* and shows real kids mixing paint. In order to match paint colors, they need to **check their steps** and **make it work**.
   - **Book:** Tell parents that the child care provider is reading this book to the children right now. The book is *Teddy Bear Patterns* and it relates to the caterpillar activity.



2. Explain that parents will be receiving additional activity handouts at the end of the session, so they can practice more at home. When they do the activities, they can also watch the related videos and read the books.

Wrap Up (5 minutes)

1. Review and discuss the session. Tell parents:
   - *Let's talk about the CT skill we've been practicing. Who can tell me what to do when there's a problem? How did you use the two steps when you did today's activity?*
   - *Your children will join us in a few minutes, and you'll have the opportunity to do the same activity with them, using the activity handout as a guide.*
   - *Does anyone have any final questions about doing the activity with your child?*
2. Transition to the Parent-Child Activities. Parents can take a quick break and greet their children as they enter the room and sit together.

Child Play Session

In this 45-minute session, children will:

- Meet with a child care provider while their parents meet with an educator.
- Listen to a story, play at activity stations, and watch a video.

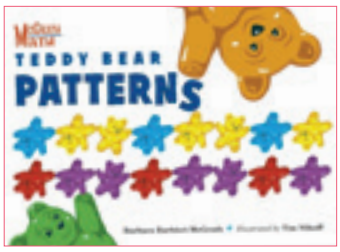
  (In this session, you'll read the book first to give children background information about patterns. They will create their own patterns and then finish up by watching the video.)

Preparing for the Session

website: **ahaisland.org**
➡ **Username: aha**
➡ **Password: island**

1. Set out a child sign-in sheet and provide name tags.
2. Go to the AHA! Island website and log in.
3. Attach a projector to the computer, if needed.
4. Gather the materials for Directed Child Play and set up stations. During this session, children will create patterns.
   - **Station #1:** Set out materials that children can use to make patterns, such as snap cubes, color tiles, counting bears, or blocks.
   - **Station #2:** Set out a variety of art supplies that can be used to make patterns such as paper, crayons, scissors, tape, string, beads, or modeling dough.

Read a Book (10 minutes)



1. Read *Teddy Bear Patterns* by Barbara Barbieri McGrath. Say:
   - *Now we're going to read a book called* Teddy Bear Patterns. *This book is about colored teddy bears and different patterns you can make with them.*
   - *Can anyone tell me what a pattern is?*
2. Then ask the children:
   - *Let's look at the color pattern on the color and say the pattern out loud: blue, yellow, yellow; blue, yellow, yellow; blue, yellow. What color should come next?*
   - *If you made a teddy bear pattern, how many colors would you use? What pattern would you make?*

Directed Child Play (25 minutes)

1. Tell children that it's now their turn to make patterns, just like in the book.
2. Show children the activity stations and explain what to do at each one.
   - Tell the children that you'd like them to make patterns at both stations. Show a few examples of how to make patterns using some of the different materials.
3. After 20 minutes tell children to clean up their materials. Then invite them to join you to watch a video.

Watch a Video (10 minutes)

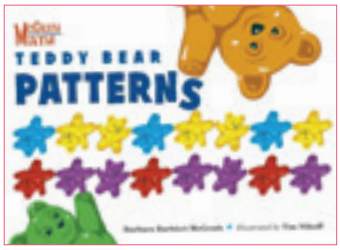
1. Have children gather around the computer, or if the group is large, set up a computer with projector to show the video.
2. Tell children:
   - *Let's watch a video about the monkeys and their friends. In this video, the monkeys make lemonade.*
3. Show the video: *Going Bananas with Lemonade*
4. Tell the children that they will now join their parents to do an activity. Thank them for coming and walk them to meet their parents.

Parent-Child Activities

In this 45-minute session, you'll:

- Support parents as they repeat the activity with their children.
- Reinforce the CT skill as families work together.
- Distribute handouts and resources so families can practice more at home.

Greet & Share (2 minutes)



1. Welcome children back for another session. Hold up *Teddy Bear Patterns* and say:
   - *Raise your hand if you know this book. Can anyone tell me what happens in the book?*
   - *Today we're going to create our own patterns, just like the book.*

Watch the Story (13 minutes)

1. Introduce the video. Tell families:
   - *First, we're going to watch the video you saw earlier. Let's watch it together.*
2. Show the video: *Going Bananas with Lemonade*
3. Have parents use their *Create a Colorful Caterpillar* handout to ask and discuss the questions with their children.
4. Finish by saying:
   - *The monkeys had to **check their steps** because the lemonade was too sour. Then they **made it work** by adding some sugar. You can use those same steps to fix almost anything!*

Do the Activity (20 minutes)

1. Say: *Now we're going to make colorful caterpillars!*
2. Direct parents to the second page of the handout to do the activity with their child.
3. Tell families:
   - *First, you'll make your caterpillars. Then you'll do what the monkeys did—you'll **check your steps** to see if there are any problems with your pattern. If so, you'll need to **make it work**. Let's try it!*

4. As families do the activity, circulate and ask questions that encourage children to explain their thinking, such as:
   - *Can you tell me about your pattern?*
   - *What colors are you using in your pattern? What is their order?*
   - *What color goes next? How do you know?*
5. Take photos of families making their caterpillars. (You'll show them during Learning Party 4, the celebration.)

Watch the Video (5 minutes)

1. Tell families:
   - *Let's watch a video about two friends who want to paint their playhouse so it matches their real house. But to match the color, they'll need to check their steps and make it work.*
2. Show the video: *Playing Around with Paint*

Wrap-Up (5 minutes)

1. Review the session. Tell families:
   - *Today we made caterpillars with colorful patterns. We checked our steps and when we found mistakes in our patterns, we made it work. You can use the same steps to solve many different kinds of problems!*
   - *Before our next Learning Party, I'd like you to keep practicing making it work by doing another activity at home. You can set the table, make goody bags, or do both! You'll use things that you can easily find around your home.*
   - *When you're done, take pictures of the things you create, email them to me, and we'll share them at the last Learning Party.*

For the Next Party

Remind parents to send photos of their at-home experiences. You'll show the photos at the last Learning Party.

2. Distribute the handouts:
   - *Set the Table*
   - *Make Goody Bags*

website: **ahaisland.org**
Username: aha
Password: island

3. Give instructions about the take-home activities:
   - Suggest that parents do one or both of the take-home activities.
   - Pull up the website on your computer or projector and show parents how to log into the website and find the videos. If parents have a computer or a smart phone, they can watch the videos with their children when they do the activity at home.

- Explain that if parents are unable to access the web to watch the videos, they can still do the activities and read the books.

4. If you're providing 9 books in total (to accompany the take-home activities), distribute:

- *The Little Kids' Table* by Mary Ann McCabe Riehle
- *The Cookie Fiasco by Dan Santat*

If you're providing 15 books in total (to accompany all the activities), also distribute *Teddy Bear Patterns* by Barbara Barbieri McGrath.

Learning Party 4

90 minutes

CT Celebration

It's time to celebrate! Children and their parents have learned three computational thinking skills and participated in several activities during the Learning Parties and at home. The final session is broken up into two parts:

- **Part 1: Activity Stations (60 minutes)**
  Families will rotate through three short activities, one for each of the CT skill learned.
- **Part 2: Party! (30 minutes)**
  Families will view photos of the activities they did during the sessions and at home, watch AHA! Island music videos, enjoy refreshments, and receive certificates.

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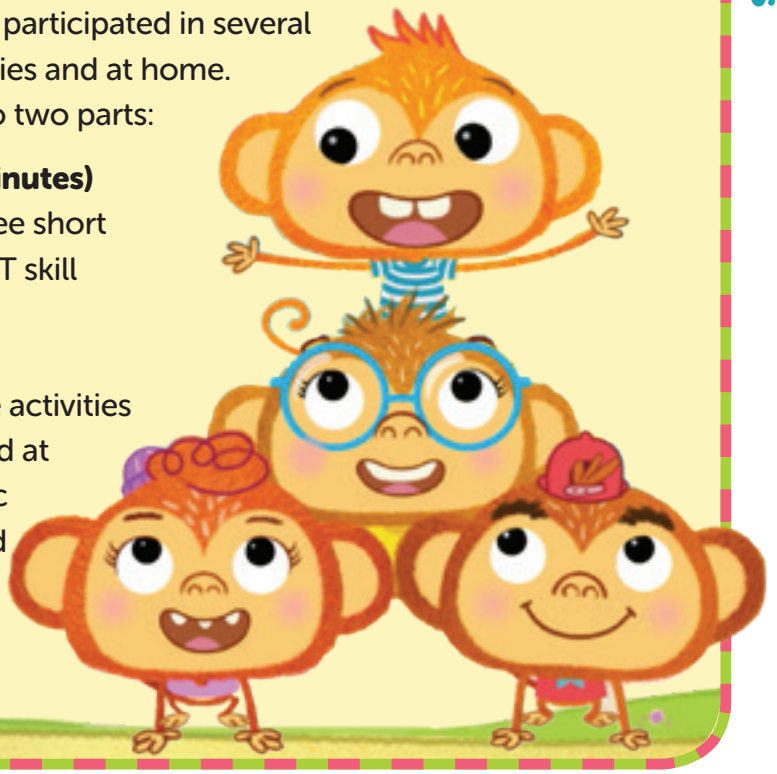


Celebration Set Up

Part I: Activity Stations

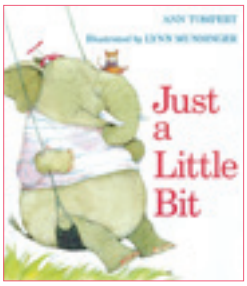
You'll be setting up three different activity stations for families to rotate through. Families will spend 20 minutes at each, practicing a different CT skill at each one. Each activity station will need: copies of the activity handout, copies of the read aloud book, and materials to do the activity. The amount of materials you need at each station depends on the number of families that are participating.

Station #1:
Create, Test, Improve!

Make a Mobile

Set out the following materials:

- Clothes hangers
- String
- Toys, photos, drawings, or other small objects that children enjoy
- Optional: tape
- Copies of the *Make a Mobile* handout (Downloaded from the AHA! Island website)
- One or more copies of the read-aloud book, *Just a Little Bit* by Ann Tompert
- Activity Station #1 sign (see page 41)



Station #2: Step It Out!

Make a Story

Set out the following materials:

- Scissors
- Story cards (printed and cut, see last 3 pages of the *Make a Story* handout)
- Copies of the *Make a Mobile* handout (Downloaded from the AHA! Island website)
- One or more copies of the read aloud book, *The Backwards Birthday Party* by Tom Chapin and John Forster
- Activity Station #2 sign (see page 42)

Station #3: Make It Work!

Take Me to the Fair

Set out the following materials:

- Cardboard
- Blocks or books
- Toy cars or other objects that roll
- Copies of the *Take Me to the Fair* handout (Downloaded from the AHA! Island website)
- One or more copies of the read aloud book, *Going Places* by Peter and Paul Reynolds
- Activity Station #3 sign (see page 43)

Part 2: Party! (30 minutes)

During the second part of the celebration, families enjoy refreshments, watch AHA! Island music videos, and view photos of their in-session and at-home experiences.

Photo Wall/Slideshow

How to prepare:

- Make a slideshow containing photos from previous Learning Parties and families' take-home experiences.
- Set up a computer to play the slideshow. You may wish to have the slideshow loop continuously so families can come and go throughout the celebration.

OR

- Create a photo wall displaying printouts of the photos.

Music Videos

How to prepare:

- Set up an Internet-enabled computer displaying the AHA! Island website so families can watch the music videos.
- Open the music video file—it will loop continuously. This will enable families to enjoy a stream of music videos while they come and go throughout the celebration.

Refreshments, Certificates, Additional Activities and Books

How to prepare:

- Set out refreshments for families to enjoy during the celebration.
- Print certificates and fill them out for each family (see page 44).
- Print and make copies of the take-home activities (downloaded from the AHA! Island website):
  - *Create an Obstacle Course*
  - *Snack Stacks*
  - *Make Sound Shakers*

- Gather copies of the books to send home with families. If you're providing 9 books in total (to accompany the take-home activities), distribute:
  - *We're Going on a Bear Hunt* by Michael Rosen
  - *Baking with Dad* by Aurora Cacciapuoti
  - *Rock 'n' Roll Soul* by Susan Verde

  If you're providing 15 books in total (to accompany all the activities), distribute these additional titles:

  - *Just a Little Bit* by Ann Tompert
  - *The Backwards Birthday Party* by Tom Chapin and John Forster
  - *Going Places* by Peter and Paul Reynolds

The Celebration

Greet & Share (5 minutes)

1. Greet families and welcome them back for the final session. Then say:
   - *Today is our final Learning Party! It's going to be a little different from the others.*
   - *You're going to have the opportunity to rotate to 3 different activities, one for each of the CT skills that we have learned. After you do all 3 activities, we'll celebrate what we learned by sharing photos and having some snacks.*
2. Walk to the activity stations and give an overview of each one. Explain:
   - *The first station is* Make a Mobile. *You'll practice* ***create, test, improve!*** *when you try to make a mobile that hangs evenly and balances. You'll have 20 minutes to do the activity before you rotate to the next one.*
   - *The second station is* Make a Story. *You'll practice* ***step it out*** *when you make a story about the AHA! Island monkeys.*
   - *The third station is* Take Me to the Fair. *You'll practice* ***make it work*** *when you try to roll a car down a ramp to the Fun Fair.*
   - *Since you'll only have 20 minutes at each station, do the activity first. If you finish up early, you can read the story that goes with the activity.*
3. Divide families into 3 groups and assign each group an activity station to start at. Reassure families that they'll get a chance to complete all 3 activities during the celebration.

Part I: Activity Stations (65 minutes)

1. Rotate families through each activity station, allowing them 20 minutes at each one.
2. Circulate to each station and assist as needed. Ask the questions provided on the activity sheets to help families think about the CT skills, such as:
   - *How did testing help you improve your mobile?*
   - *Tell me how you stepped it out to make your story.*
   - *How did you check your steps and make it work to get the car to the Fun Fair?*
3. Have families clean up their materials.

Part 2: Party! (20 minutes)

1. Serve refreshments and point out the photo wall or computer with slideshow. Tell families that the photos they sent of their at-home activities are included, along with photos taken during the sessions.
2. Point out the music video station. Explain that families can enjoy their snacks while watching the AHA! Island music videos. Encourage them to sing along or dance if they feel like it!
3. In the last 5 minutes, congratulate families for attending the Learning Parties and completing the CT activities! Pass out certificates to each family and praise them for their hard work.
4. Distribute the following handouts: *Create an Obstacle Course, Snack Stacks,* and *Make Sound Shakers.* Tell families:
   - *This is our last Learning Party, but I'd like you to keep practicing the CT skills at home. I'm going to pass out 3 additional activities, one for each of the CT skills we practiced, so that you can continue to practice what you've learned.*
5. If you're providing 9 books in total (to accompany the take-home activities), distribute:
   - *We're Going on a Bear Hunt* by Michael Rosen
   - *Baking with Dad* by Aurora Cacciapuoti
   - *Rock 'n' Roll Soul* by Susan Verde

   If you're providing 15 books in total (to accompany all the activities), distribute these additional titles:
   - *Just a Little Bit* by Ann Tompert
   - *The Backwards Birthday Party* by Tom Chapin and John Forster
   - *Going Places* by Peter and Paul Reynolds

Station #1: Create, Test, Improve!

Make a Mobile

Station #2: Step It Out!

Make a Story

Station #3: Make It Work!

Take Me to the Fair

Certificate of Achievement

This certificate is proudly awarded to

_____

for their outstanding participation in the AHA! Island computational thinking program. They have successfully learned how to **create, test, improve**; **step it out**; and **make it work!**

FRED MAISY DAISY BO

_____

Signed, the Monkeys

_____

Official Signature

Materials List

Learning Party 1

Activity: Design a Bridge

- Toy car(s) or wagon(s)
- Container, such as a tub or box (about 14"–18" wide) (The bridges will be built across the container.)
- Household items to make the bridges, such as rulers, paint sticks, construction paper, or cardboard (The items should be shorter than the containers.)
- Optional: If you're using waterproof tubs, consider providing water—it's fun for children to build their bridge over real water! (However, be prepared for spills or extra cleanup.)
- Tape, string, scissors

Learning Party 2

Activity: Teach the Robot

- An adult-sized jacket or a button-down shirt (Ask parent to bring one of these to the session.)
- Scissors
- Robot mask (included in *Teach the Robot* handouts) If possible, print mask on colored construction paper
- String or pipe cleaners to attach the mask (Consider assembling the masks before the session.)

Learning Party 3

Activity: Create a Colorful Caterpillar

- Modeling dough or clay (2-3 different colors)
- Paper or paper plates

Learning Party 4

Activity Station #1: Create, Test, Improve

Activity: Make a Mobile

- Clothes hangers
- String
- Toys, photos, drawings, or other small objects that children enjoy (Consider asking parents to bring some of these items from home.)
- Tape (optional)

Activity Station #2: Step It Out

Activity: Make a Story

- Scissors
- Story cards (printed and cut; see last 2 pages of the *Make a Story* handout)

Activity Station #3: Make It Work!

Activity: Take Me to the Fair

- Cardboard
- Blocks or books
- Toy cars or other objects that roll

Photo Wall/Slideshow

- Computer to show the digital slideshow
- OR printouts of the digital photos

Music Videos

- Internet-enabled computer displaying the AHA! Island video file

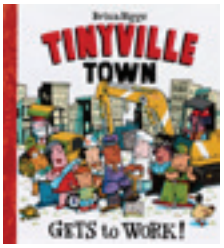
Other Materials

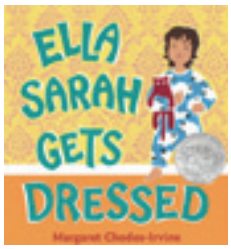
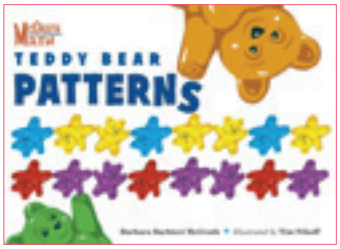
- Refreshments and paper goods
- Activity Station Signs (included with Learning Party 4)
- Certificates of Achievement (included with Learning Party 4)
- Books to send home (see Book List)

Book List

AHA! Island includes 15 book recommendations to accompany the activities. Some books are read during the Learning Parties. Other books are given to families to use with the take-home activities and to help them start their own early learning libraries. Determine the number of books your program will provide to families:

- If your program is providing 15 books in total, give families the Books to Read in the Session and the Books to Send Home
- If your program is providing 9 books in total, give families the Books to Send Home

	Book to Read in the Session	Books to Send Home
Learning Party 1	***Tinyville Town Gets to Work!*** by Brian Biggs 	***A House for Birdie*** by Stuart J. Murphy  ***The Perfect Pillow*** by Eric Pinder 

	Book to Read in the Session	Books to Send Home
Learning Party 2	***Pete the Cat: Robo-Pete*** by James Dean 	***Ella Sarah Gets Dressed*** by Margaret Chodos-Irvine  ***Henry's Map*** by David Elliot 
Learning Party 3	***Teddy Bear Patterns*** by Barbara Barbieri McGrath 	***The Little Kids' Table*** by Mary Ann McCabe Riehle  ***The Cookie Fiasco*** by Dan Santat 

Learning Party 4

Books to Read in the Session

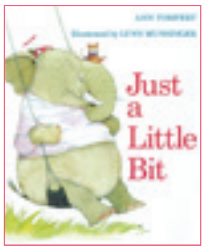
We're Going on a Bear Hunt
by Michael Rosen

Baking with Dad
by Aurora Cacciapuoti

Rock 'n' Roll Soul
by Susan Verde

Books to Send Home

Just a Little Bit
by Ann Tompert



The Backwards Birthday Party
by Tom Chapin

Going Places
by Peter and Paul Reynolds

Standards Alignment

Maryland Early Learning Standards

The Maryland Early Learning Standards define the developmental and learning goals for children, from birth to age 8. They outline what children should know and be able to do so they can be successful in school and in life. The standards written to guide early childhood administrators and educators as they determine pedagogy, curriculum, assessment, professional development, and family engagement for the children they serve.
https://earlychildhood.marylandpublicschools.org/system/files/filedepot/4/msde-pedagogy-report-_appendix_2016.pdf

AHA! Island aligns to the Maryland Early Learning Standards in these domains:

Language & Literacy

Reading Literature

RL2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
RL3. Analyze how and why individuals, events, and ideas develop and interact over the course of text.
RL.7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Speaking & Listening

SL1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
SL2: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
SL6: Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

Mathematics

Counting and Cardinality

CC: Count to tell the number of objects

Measurement & Data

MD: Describe and compare measurable attributes

Geometry

G: Identify and describe shapes/reason with shapes and their attributes

Science

Skills & Processes

Students will demonstrate the thinking and acting inherent in the practices of sciences
A. Constructing Knowledge
B. Applying Evidence and Reasoning
C. Communicating Scientific Information
D. Technology

Social Foundations

Approaches to Learning & Executive Functioning

Demonstrates persistence

Head Start Early Learning Outcomes Framework

The Head Start Early Learning Outcomes Framework (ELOF) includes broad areas of early learning for infants, toddlers, and preschoolers through age five. It describes what young children should be able to do in each of the five domains, based on comprehensive research in early education.

https://eclkc.ohs.acf.hhs.gov/school-readiness/article/head-start-early-learning-outcomes-framework

AHA! Island aligns to ELOF's five central developmental domains:

Approaches to Learning

Cognitive Self-Regulation (Executive Functioning)

P-ATL 7. Child persists in tasks.
P-ATL 8. Child holds information in mind and manipulates it to perform tasks.

Initiative and Curiosity

P-ATL 10. Child demonstrates initiative and independence.
P-ATL 11. Child shows interest in and curiosity about the world around them.

Creativity

P-ATL 12. Child expresses creativity in thinking and communication.
P-ATL 13. Child uses imagination in play and interactions with others.

Social and Emotional Development

Relationships with Adults

P-SE 1. Child engages in and maintains positive relationships and interactions with adults.
P-SE 2. Child engages in prosocial and cooperative behavior with adults.

Language and Literacy

Attending and Understanding

P-LC 1. Child attends to communication and language from others.

Communication and Speaking

P-LC 4. Child understands, follows, and uses appropriate social and conversational rules.

Print and Alphabet Knowledge

P-LIT 2. Child demonstrates an understanding of how print is used (functions of print) and the rules that govern how print works (conventions of print).

Comprehension and Text Structure

P-LIT 4. Child demonstrates an understanding of narrative structure through storytelling and retelling.
P-LIT 5. Child asks and answers questions about a book that was read aloud.

Cognition

Counting and Cardinality

P-MATH 1. Child knows number names and the count sequence.
P-MATH 2. Child recognizes the number of objects in a small set.
P-MATH 3. Child understands the relationship between numbers and quantities.

Operations and Algebraic Thinking

P-MATH 7. Child understands simple patterns.

Geometry and Spatial Sense

P-MATH 9. Child identifies, describes, compares, and composes shapes.
P-MATH 10. Child explores the positions of objects in space.

Scientific Inquiry

P-SCI 1. Child observes and describes observable phenomena (e.g., objects, materials, organisms, and events).

Reasoning and Problem-Solving

P-SCI 5. Child plans and conducts investigations and experiments.
P-SCI 6. Child analyzes results, draws conclusions, and communicates results.

Perceptual, Motor, and Physical Development

Gross Motor

P-PMP 1. Child demonstrates control, strength, and coordination of large muscles.
P-PMP 2. Child uses perceptual information to guide motions and interactions with objects and other people.

Fine Motor

P-PMP 3. Child demonstrates increasing control, strength, and coordination of small muscles.

K12 Computer Science Framework

The K12 Computer Science Framework was created by several organizations, in collaboration with school districts, to develop guidelines for computer science education in kindergarten through twelfth grade. The goal of the framework is to "inform the development of standards and curriculum, build capacity for teaching computer science, and implement computer science pathways."

https://k12cs.org

AHA! Island aligns to several of the K12 Computer Science Framework's Core Practices:

Core Practices

Practice 3. Recognizing and Defining Computational Problems

P3.2 Decompose complex real-world problems into manageable sub-problems that could integrate existing solutions or procedures.

Practice 4. Developing and Using Abstractions

P4.1 Extract common features from a set of interrelated processes or complex phenomena.
P4.4 Model phenomena and processes and simulate systems to understand and evaluate potential outcomes.

Practice 5. Creating Computational Artifacts

P5.1 Plan the development of a computational artifact using an iterative process that includes reflection on and modification of the plan, taking into account key features, time and resource constraints, and user expectations.
P5.2. Create a computational artifact for practical intent, personal expression, or to address a societal issue.
P5.3. Modify an existing artifact to improve or customize it.

Practice 6. Testing and Refining Computational Artifacts

P6.1. Systematically test computational artifacts by considering all scenarios and using test cases.
P6.2. Identify and fix errors using a systematic process.
P6.3. Evaluate and refine a computational artifact multiple times to enhance its performance, reliability, usability, and accessibility.

Practice 7. Communicating About Computing

P7.2. Describe, justify, and document computational processes and solutions using appropriate terminology consistent with the intended audience and purpose.

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