## 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**

1

### 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?*

2

### 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

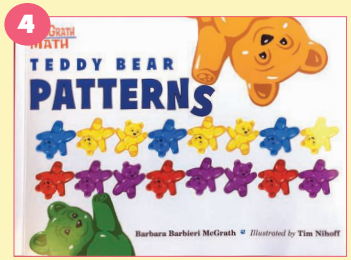
3

### 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.

4




### 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**

## 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

(see materials on first page)

1. Tell your child:
   - *Let's make a caterpillar with a colorful pattern.*
2. Explain that the colors on the caterpillar should repeat in the same order. Say:
   - *The pattern can have two colors, like pink, blue; pink, blue; pink, blue.*
   - *Or it can have three colors like red, purple, yellow; red, purple, yellow; red, purple, yellow.*
3. Have your child choose 2 or 3 colors of modeling clay and roll the clay into little balls. Then line the balls up in a row on the paper. Say:
   - *What kind of pattern are you going to make for your caterpillar?*
   - *What steps will you take?*
4. Give your child time to make her caterpillar. Let her make mistakes in the pattern—she'll **check her steps** in a minute.

### Check Your Steps!

1. Tell your child:
   - *Let's **check your steps** to see if your pattern has colors that repeat in the same order.*
2. Have your child **check her steps** by touching each colored ball and naming the color. Say:
   - *Tell me about your pattern.*
   - *Are the colors in the right places?*
3. If your child finds a mistake in the pattern, help her **make it work!** (Go to the next column.)
4. If there aren't any mistakes, say:
   - *Let's play a game. I'm going to make a mistake in your pattern. Then you'll **check my steps** to see if you can find it.*
5. Move the colored balls around to make a mistake in the pattern. Then have your child **check your steps** to find it.

### Make It Work!

1. Tell your child:
   - *Let's **make it work!** How can you change the caterpillar to fix the pattern?*
2. After your child has fixed the pattern, let her finish the caterpillar by adding a head, face, and antennae!
3. Remind your child of what she did:
   - *You **checked your steps** by looking at your caterpillar and making sure the pattern was correct. When you found a mistake, you thought of a way to **make it work!***

**TIP: Try another challenge**

Play the game again. Try making a mistake in a more complicated pattern. Then challenge your child to **check your steps** and **make it work!**

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