Lesson 13: Expand Your Storytelling Toolbox

Powerful Ideas of Computer Science	Design Process, Representation
Powerful Ideas of Literacy	Writing Process
PTD	Content Creation
Palette of Virtues	Patience, Curiosity
Children will be able to…	• Use the Grow, Shrink, Hide and Show Blocks in ScratchJr. • Revise their existing projects by adding new blocks to their Katherine story. • Describe items as "big" and "small."
Vocabulary	• Appearance: the way someone or something looks
Teacher Preparation	• Read lesson plan. • Print the ScratchJr Block Cut Outs Size Edition pages and cut out the header off of each page. • Have a balloon for demonstration. • View example projects to familiarize with project activity. • Print Lesson 13 Design Journal for each child or refer to Full Design Journal.

Warm Up

- **Programmer Says: Size Edition!** *(Suggested Time: 10 minutes)*
  - Use the ScratchJr Block Cut Outs Size Edition for this activity.
  - Like we have played before, *Programmer Says* is just like *Simon Says* but the Programmer is telling us what to do. In this edition of the game, the instructions children will be given by the programmer should center on **size**.
  - Briefly introduce each programming instruction and what it means (use only the blocks listed in the ScratchJr Block Cut Outs Size Edition).
  - Have the class stand up. Hold up one big ScratchJr Block Cut Outs at a time and say, "Programmer says to (Name Motion)." Intermittently, hold up the block and say "(Name Motion)" without saying "Programmer Says." Children should complete the motion when the programmer says to, but should remain still when the teacher does not say "Programmer says." Repeat each block multiple times.

Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K © [2020 - 2025] DevTech Research Group. Some Rights Reserved.
Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K is licensed under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-sa/4.0/
This license requires that reusers give credit to the creator. You may distribute, remix, adapt, and build upon the material in any medium or format, but must license the modified material under identical terms and indicate what has changed from the original. You may not use or adapt this work for commercial purposes.

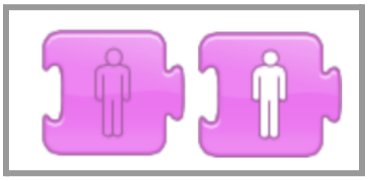
Opening Tech Circle

- **Sizing and Hiding (***Suggested Time: 5 minutes)*
    - Explain that growing, shrinking, and hiding are all examples of changing the **appearance**, or the way something looks. Just like the children changed their own appearance, they will learn how to make things grow, shrink, hide, and show on ScratchJr.

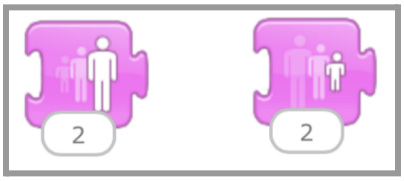
ScratchJr Time

Structure Challenge:

- **Appearance Blocks** *(Suggested Time: 15 minutes)*
    - Introduce Hide/Show Blocks: Demonstrate that adding a Hide Block to a character's code will make them disappear! You can make them reappear using a Show Block.



    - Then use the Grow/Shrink Blocks to show how a character can look as it grows during its lifespan.



    - Introduce the Reset Size Block: Demonstrate that by adding a Reset Size Block to a character's code will have your character return back to its original size.



- Parameters on Size Blocks:
    - Tell children that the size blocks also have parameters, just like the motion blocks. Instead of counting ScratchJr steps, these parameters tell you how many times to get bigger.

Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K © [2020 - 2025] DevTech Research Group. Some Rights Reserved.
Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K is licensed under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-sa/4.0/
This license requires that reusers give credit to the creator. You may distribute, remix, adapt, and build upon the material in any medium or format, but must license the modified material under identical terms and indicate what has changed from the original. You may not use or adapt this work for commercial purposes.

    - Demonstration (or verbal example if balloon is not available): Tell children the parameters on size blocks are like blowing into a balloon.
        - Ask the children to choose a number for your balloon parameter, then have them practice counting to that number. Everytime they count, blow a little more into the balloon. Then have them count to that number again, this time letting a little air out each time so the balloon shrinks!
        - Tell them that the parameter blocks let us make many different sizes for our characters, not just a small and a big. We can control how much the character grows with the parameters!
- Now bring it back to the story! Say that we can use these blocks to show Katherine growing. Tell children that they will be programming a new part of their Katherine stories-when Katherine is young!

Expressive Explorations:

- **Add Appearance Blocks (***Suggested Time: 10 minutes)*
    - Have children create a new page or change an existing page to tell the story of Katherine growing up, encourage them to add appearance blocks (Hide/Show, Grow/Shrink, Reset Size) to show that she's younger in the first part of the story!
    - Have children add the Repeat Forever block at the end of the program and then begin their programs and leave them running.
    - Encourage them to walk around the classroom observing other children's projects and codes.
    - Using a list of block images, ask them to cross out all the blocks they find in other children's codes.

Word Time

- **Lesson 13 Design Journal**
    - Have children circle and draw which blocks they used in their Katherine stories and which blocks go at the beginning, middle, and end of their programs!

Closing Tech Circle

- **Project Share (***Suggested Time: 5 minutes)*
    - Have children share how they used the appearance blocks in their projects. Encourage children to show their peers their code, compliment each other's projects, and ask each other questions about their projects. For example:
        - What was the most interesting project they found? Why?
        - How many different blocks did you find?
        - What do you wonder about someone's project?
        - Is there something positive you can say about someone's project?

Opportunities for Differentiation

- **Extra Challenge**

Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K © [2020 - 2025] DevTech Research Group. Some Rights Reserved.
Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K is licensed under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-sa/4.0/
This license requires that reusers give credit to the creator. You may distribute, remix, adapt, and build upon the material in any medium or format, but must license the modified material under identical terms and indicate what has changed from the original. You may not use or adapt this work for commercial purposes.

- If children are done with their programs, have them pair up with other students that are done and practice telling the story of their program before they share.

Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K © [2020 - 2025] DevTech Research Group. Some Rights Reserved.
Coding As Another Language (CAL) for ScratchJr (CAL-ScratchJr) - K is licensed under Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International. To view a copy of this license, visit https://creativecommons.org/licenses/by-nc-sa/4.0/
This license requires that reusers give credit to the creator. You may distribute, remix, adapt, and build upon the material in any medium or format, but must license the modified material under identical terms and indicate what has changed from the original. You may not use or adapt this work for commercial purposes.