Lesson 8: Get in Character

Powerful Ideas of Computer Science	Design Process
Powerful Ideas of Literacy	Writing Process
PTD	Communication, Content Creation, Creativity
Palette of Virtues	Curiosity, Open-Mindedness, Perseverance
Children will be able to…	● Identify similarities between writing and programming. ● Identify the characters in a story. ● Design a new character in ScratchJr ● Use the text tool in ScratchJr to add text to a project
Vocabulary	● Title: name of a book or project ● Authors: a person who writes a book
Teacher Preparation	● Read lesson plan. ● Have a tab open for the Anchor Chart for Design Process slideshow ready to be projected. ● Have access to the book *Ada Byron Lovelace & the Thinking Machine* either in hard copy or digital and ready to be projected. ● Read the Ada Byron Lovelace Vocabulary list.

Warm Up

- **Design Process Song** *(Suggested time: 5 minutes)*
  - Display the Anchor Chart for Design Process on the screen again and sing the Design Process song!

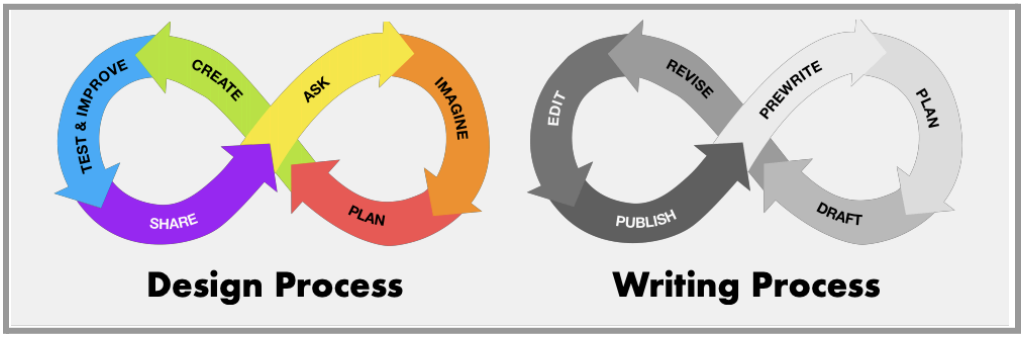
(to the tune of "Twinkle, Twinkle")
Ask and imagine, plan and create,
Test and improve and share what we make.
(Repeat)

Opening Tech Circle

- **Design Process and Writing Process** *(Suggested time: 10 minutes)*
  - Discuss how **authors** go through a similar process with their writing.

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- Show children the Design Process and the Writing Process anchor chart. Explain to children that both creative processes require imagination, planning, creating, revising, feedback, and sharing. Both programmers and writers turn ideas into projects that are shared with others. Ask children what other activities require a process (e.g., cooking, painting, getting better at a sport, etc.).
- Discuss what is the same and different between programmers and authors. Writing Process: Just as programmers use the Design Process to design and create projects, writers use the Writing Process to brainstorm ideas, write a draft, make revisions, and share their writing with others. The Writing Process is also a cycle - there's no official starting or ending point, and you can move back and forth between steps!



Word Time

- **Read** *Ada Byron Lovelace & the Thinking Machine* (English) *(Suggested Time: 10 minutes)*
  - Use this vocabulary list for quick explanations of vocabulary.
  - Pause at various points during the book for comprehension checks.

ScratchJr Time

Structure Challenge: **(***Suggested Time: 5 minutes)*

1. **The Paint Editor Tool**
   Tell children that now they will make their own Ada in ScratchJr! Introduce the Paint Editor tool, using the following steps below:

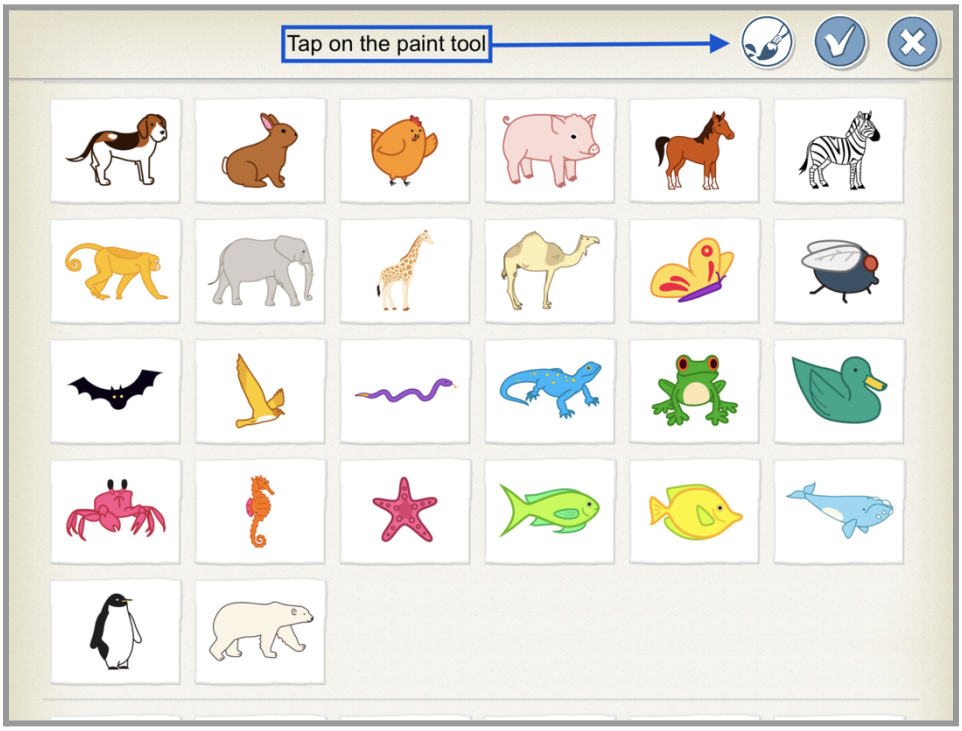
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1. Tap on the plus sign to add a character

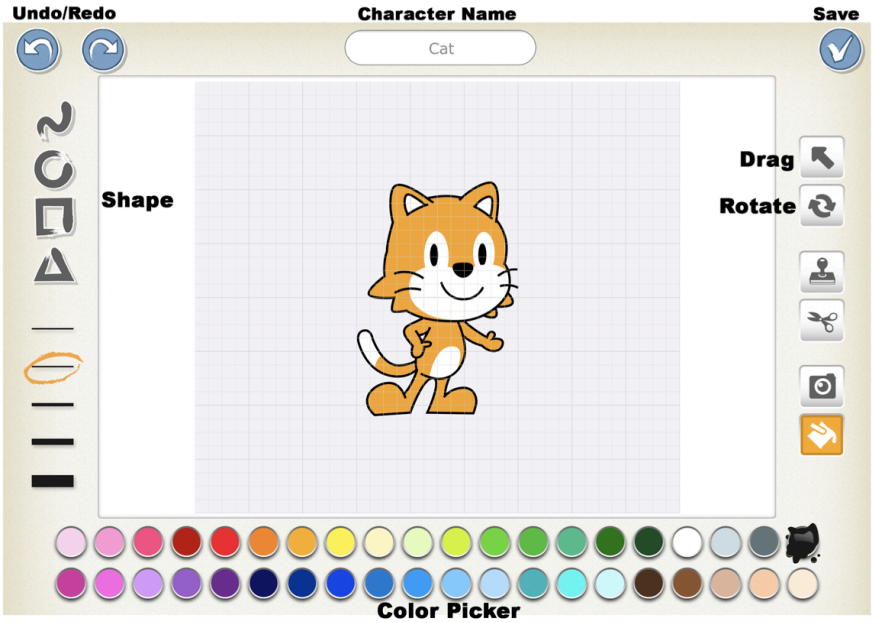


2. Select a character to edit or create one from scratch using the Paint Editor.

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3. Using the guide below, direct children through the Paint Editor.



2. Adding Text

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- Children can use the Add Text button to name their project, add their own name, or give their project a title using the following steps:



1. Use the Add Text button to create a text box on the screen.

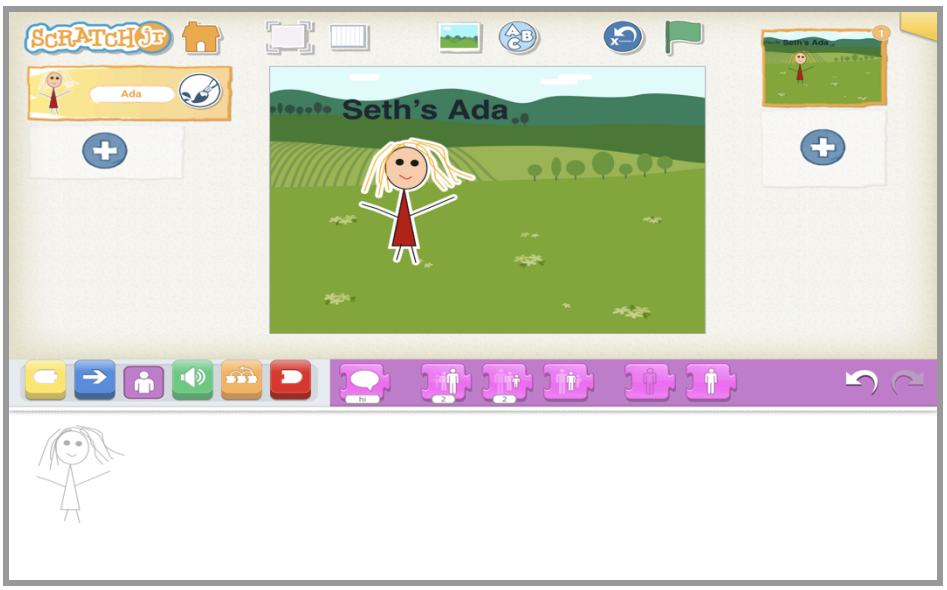
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2. Using the device keyboard, children can add text.
3. When they finish, they can drag the text box around the screen

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Note: Characters can be moved and programmed; Backgrounds cannot.



Expressive Explorations:

1. **Make Your Own Ada**

(*Suggested Time: 10 minutes)*

- Display a few scenes from the story for children to reference.
  - Ask the children questions about Ada to gather details.
    - E.g., "What color is Ada's hair?" "What is Ada wearing?"
- Children will begin designing their own Ada using the Paint Editor tool.

Closing Tech Circle

- **Share Creations (***Suggested Time: 5 minutes)*
  - Children share their project with the class. Ask them to share about their Ada's and to notice how each one is different from the others. Ask them to mention a tool they used in the pain editor to create their character.

Opportunities for Differentiation

- **Read Along Link**
  - Refer to *Ada Byron Lovelace and the Thinking Machine Read Along*, if the physical book cannot be accessed or if teaching in a virtual format.
  - Reading starts at 1:08 and ends at 11:34.

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