

***ELA= Standards found in English Language Arts (SL= Speaking and Listening, RI=Reading Informational text, L = Language)**

**** LM= Standards found in Library Media (LM=Media Literacy)**

***** CS, AP, IT, CT = Computer Science Standards**

Materials Needed: Scratch Jr. App (you can find this on Apple AppStore, Google Play, or [here](#)), Scratch Jr., The Official Scratch Jr. Book ([here](#)), and Scratch Jr. Coding Cards ([here](#)), and a software that allows you to make charts and graphs (i.e. Microsoft Word)

Computer Science Lesson 1

Standards Taught: 1.CS.1, 1.AP.2, 1.IC.1, 1.CT.1

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. Cards: Green 1 & 2 Friend to Play With Pencil/Pen Blank Papers		Play the <i>Guide a Friend</i> and <i>Draw a Picture</i> games found on the Scratch Jr. cards. Discuss the terms in italics on the cards, defining each one and asking your child to repeat what they've learned.

Computer Science Lesson 2

Standards Taught: 1.CS.1, 1.CT.1, 1.AP.2

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. Cards: Green Card 3 and Blue Card 31 Scratch Jr. App Blank Paper Supplies for PB&J Sandwich Friend or Family Member		<p>Discuss the terms on the front of the green card. Point out that we are simply talking about listing the steps to complete a task. By breaking the task into smaller steps, we can help others understand exactly how to do what we are asking.</p> <p>Work through the green card activity with your child, asking a friend or family member to follow the steps exactly as written. Help your child de-bug their algorithm if needed.</p> <p>Next, allow your child some time to explore the Scratch Jr. App. Point out that this app helps them to build something, just like a sandwich, but the instructions they put into the computer must be broken down into steps. Allow them to play and experiment with the game for a time.</p> <p>After your child is comfortable, ask them to work through the <i>Feed the Rabbit</i> card. Help your child learn how to add backgrounds, characters, and blocks to their program. If needed, review the corresponding Scratch Jr. cards to learn more about doing these simple tasks. This lesson may take more than one day of work. Take your time and allow your child to explore, create, and experiment as they learn what the different aspects of Scratch Jr. do.</p>

Computer Science Lesson 3

Standards Taught: 1.CT.2, 1.IC.1, 1.CS.1

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. Card: Green Card 5 Masking Tape Friend or Family Member		Briefly review the previous two lessons with your child. Then, work though the <i>Walk in a Square</i> card with your child.

Computer Science Lesson 4

Standards Taught: 1.CT.2, 1.IC.1, 1.CS.1

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. Card: Green 4 Scratch Jr. Blocks Printouts (see the back of the card)		Briefly review the previous lessons and terms with your child. Relate these lessons to the card for today. Work through <i>The Hokey Pokey</i> card with your child.

Computer Science Lesson 5

Standards Taught: 1.AP.2, 1.AP.3, 1.CT.1

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. Cards: Green 6, Blue 40 Toy building bricks (e.g. Legos) Scratch Jr. App		Review the terms <i>program</i> and <i>algorithm</i> , and <i>sequence</i> with your child. Then, introduce the <i>Sorting and Searching</i> card. Play the game on the card with your child. Next, help your child log into their Scratch Jr. account and complete the <i>Goodnight Kitten</i> card.

Computer Science Lesson 6

Standards Taught: 1.AP.2, 1.AP.3, 1.CT.1

Materials:	Preparation:	Implementing the Lesson:
Group of friends or family members Scratch Jr. Cards: Green 7		Review the terms <i>program</i> and <i>algorithm</i> , and <i>sequence</i> with your child. Then, introduce the terms on the card titled <i>Clapping Patterns</i> . Finally, work through the card with your child, playing the game and linking it to the new terms.

Computer Science Lesson 7

Standards Taught: 1.AP.2, 1.AP.3, 1.CT.1

Materials:	Preparation:	Implementing the Lesson:
Friends or family members to play with Scratch Jr. Card: Green 8		Review the terms <i>program</i> and <i>algorithm</i> , <i>sequence</i> , <i>modularization</i> and <i>parallelization</i> with your child. Then, introduce the term <i>conditional statements</i> and work through the card titled <i>Simon Says</i> with your child.

Computer Science Lesson 8

Standards Taught: 1.AP.1

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. App Scratch Jr. Cards: Purple 12, Green 11 Friends or family members to play with		<p>Help your child build a character in Scratch Jr. to use in this lesson. Point out that there are various things in a program that can be changed. Some of these things are numbers, words, colors, and images, or pictures.</p> <p>Work through the <i>Edit a Character</i> card with your child.</p> <p>Next, work through the <i>Invent a Language</i> card with your child. Be sure to teach your child the new term <i>representation</i>. Allow your child to create a program for a few games, taking turns with their friends.</p>

Computer Science Lesson 9

Standards Taught: 1.AP.1, 1.CS.2

Materials:	Preparation:	Implementing the Lesson:
<p>Scratch Jr. App</p> <p>Scratch Jr. Cards: Blue 21, Purple 14, Green 12</p> <p>A photo your child can add to their program, uploaded to the device they are using</p> <p>A photo of a friend, family member, or pet that your child can use to create a character, uploaded to the device they are using.</p>		<p>Ask your child to remind you of some of the parts of a program that can be changed: words, colors, number, or images. Remind them that in the previous lesson, they learned how to change colors of a character. Tell your child that today they will learn to change numbers and how to add images (or pictures) to their program.</p> <p>Help your child work through the <i>Peach Picking</i> card, pointing out that this shows us how to change the number of times a certain action happens in the program. Be sure to allow your child to change the number of times the peach wiggles.</p> <p>Next, help your child work through the <i>Add Photos</i> card, adding a photo to Scratch Jr. Then, allow them to use a photograph of a friend, family member or a pet to create their own character.</p> <p>Finally, discuss the terms on the card titled <i>I Spy a Sensor</i> and work through the card with your child.</p>

Computer Science Lesson 10

Standards Taught: 1.CS.1, 1.CS.2, 1.AP.1, 1.AP.2, 1.AP.3, 1.CT.1, 1.CT.2

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. App Scratch Jr. Cards: Green 14, Purple 4 Paper and Pencil		<p>Ask your child to tell you the elements of a good story: setting, characters, plot (events). Explain that a program can be used to tell a story. However, the story must be planned out before the program can be built.</p> <p>Help your child work through the <i>Storyboarding</i> card. Encourage your child to create at least 2 (but no more than three) pages for their story and use the characters and events available on Scratch Jr.</p> <p>Then, ask your child to open the Scratch Jr. App and begin to build their story. Help your child add characters, events, backgrounds, and pages (use the card titled <i>Add Pages</i>) to build their story. Then, allow your child to play their program, showing it to friends and family and telling the story as they go.</p>

Computer Science Lesson 11

Standards Taught: LM.ML.10.2, LM.ML.10.3, LM.ML.10.4, LM.ML.11.1, LM.ML.11.2, LM.ML.12.1, LM.ML.13.1, LM.ML.13.2, LM.ML.13.3, LM.ML.14.1

Materials:	Preparation:	Implementing the Lesson:
Account on canva.com Printer		Continue the Fine Arts lesson from yesterday, allowing your child to finish their Easter graphic.

Computer Science Lesson 12

Standards Taught: 1.AP.1

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. Cards: Purple 5, 6 & 7 Scratch Jr. App		Using your child's game from lesson 10, or another program, help your child work through the cards titled <i>Use the Grid</i> , <i>Copy a Program</i> , and <i>Copy Characters</i> .

Computer Science Lesson 13

Standards Taught: 1.AP.1, 1.AP.2, 1.AP.3, 1.CS.1, 1.CS.2, 1.CT.1, 1.CT.2

Materials:	Preparation:	Implementing the Lesson:
<p>Scratch Jr. Cards: Purple 3, 8, & 9</p> <p>The Official Scratch Jr. Book by Bers and Resnick</p> <p>Scratch Jr. App</p>		<p>Work through activity one in the book (pg. 8-20) with your child.</p> <p>Next, work through the cards titled <i>Delete Things</i> and <i>Undo, Redo, Reset</i>. You can choose to help your child use these skills within their newly built program or to begin a new one from the card.</p> <p>Finally, help your child open a new program and work through the card titled <i>Add Text</i> to review what they've learned.</p>

Computer Science Lesson 14

Standards Taught: 1.AP.1, 1.AP.2, 1.AP.3, 1.CS.1, 1.CS.2, 1.CT.1, 1.CT.2

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. App Scratch Jr. Cards: Purple 13, 15, & 16		Open the project that your child worked on from the book in the previous lesson. Help them work through the cards titled <i>Edit a Background</i> , <i>Save a Project</i> , and <i>Presentation Mode</i> to review what they've learned. Explain that presentation mode shows what someone using their program would see, without all the tools to edit it.

Computer Science Lesson 15

Standards Taught: 1.AP.3

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. App Scratch Jr. Cards: Blue 3 & 12		<p>Explain to your child that sometimes within a program you may want something to happen more than once. For example, you may want your cat character to walk to a different location. This would mean he would need to take a step over and over again. Instead of programming step after step, you can insert a repeat.</p> <p>Work through the card titled <i>Walk to the Bus Stop</i> with your child.</p> <p>Next, explain to your child that sometimes, instead of a repeat, it will be easier to use a loop. A loop is a repeat of an entire sequence rather than a single block. Work through the <i>Dance With Friends</i> card with your child.</p> <p>Finally, allow your child to explore and practice inserting repeats and loops into their programs.</p>

Computer Science Lesson 16

Standards Taught: Review

Materials:	Preparation:	Implementing the Lesson:
Scratch Jr. App Scratch Jr. Cards: Blue 4, 5, & 23		Work through each of the following cards with your child: <i>Catch the Bus</i> , <i>Go to School</i> , and <i>Stop Right There!</i> Then, allow your child to create their own program using the skills they have learned this year. Ask your child to share their program with friends and family and praise them for the types of blocks they've included in their program. Give suggestions on how to change, debug, or improve their program and allow them to make those changes.