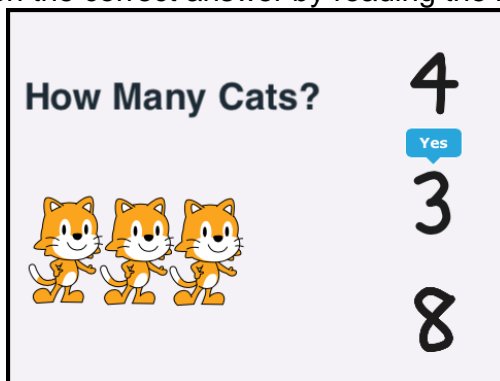




Counting and Cardinality

CCSS.MATH.CONTENT.K.CC.B.4 Counting and Cardinality: Count to Tell the Number of Objects

This project makes a game for guessing how many cats are on the screen. The player will know whether he or she has tapped on the correct answer by reading the message that appears.



These are the steps for making this project:

1. Make multiple cats with the “Stamp” tool in the Paint Editor
2. Make numbers for the possible answers
3. Make a script for the cats
4. Make scripts for the numbers
5. Put a title at the top of the screen

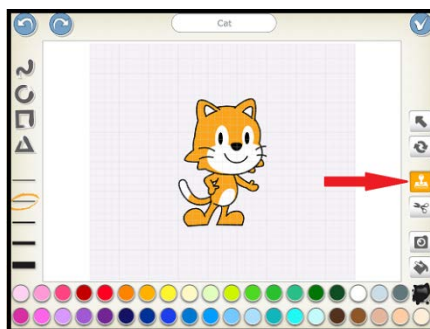
.....

1. Setup Part 1: Edit the cat character to include more cats.

Tap on the paintbrush next to the cat.



Select the stamp.



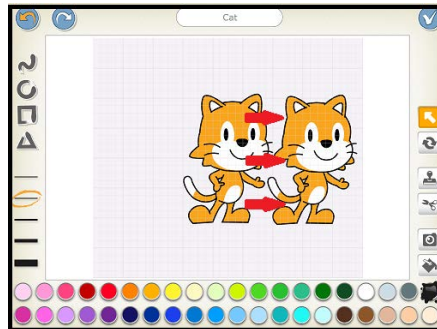


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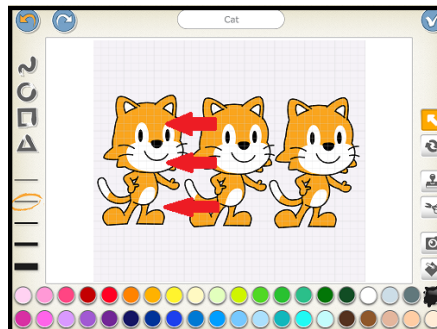
Tap on the cat to duplicate it. You will see a second cat on top of the first.



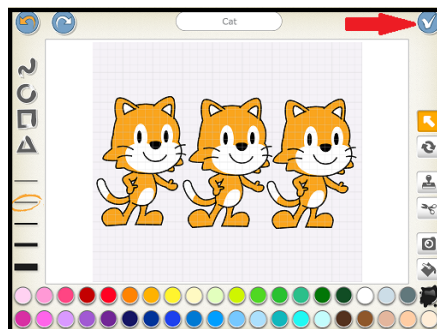
Slide the top cat over to the right.



Tap on the stamp again to make another cat, and slide the cat over to the left.



Tap on the check mark to finish editing.





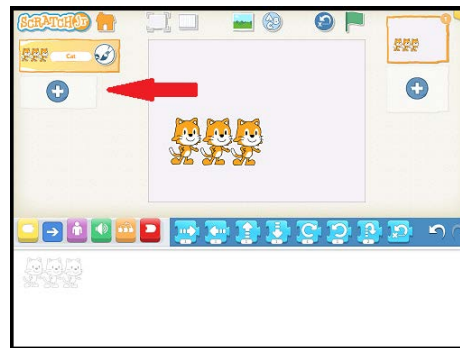
Counting and Cardinality

Slide the cats over to the left a little bit to make room for the answer choices.

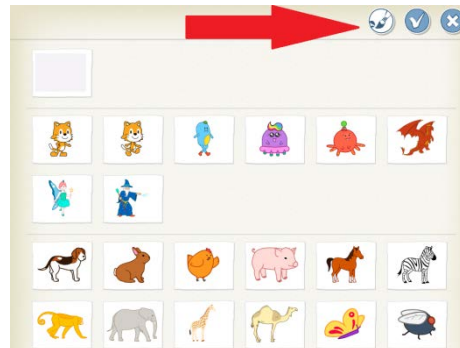


2. Setup Part 2: Make characters for the answer choices.

Click on the + in the Character Area



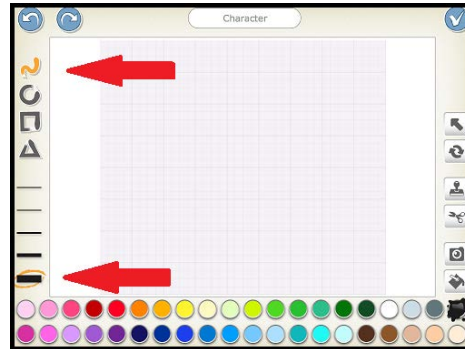
Select the paintbrush



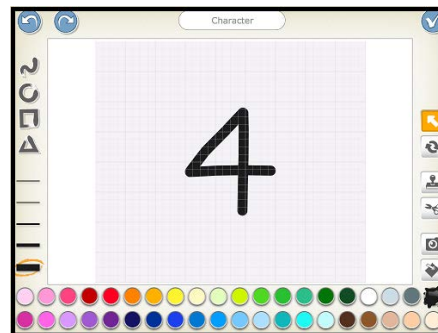


Counting and Cardinality

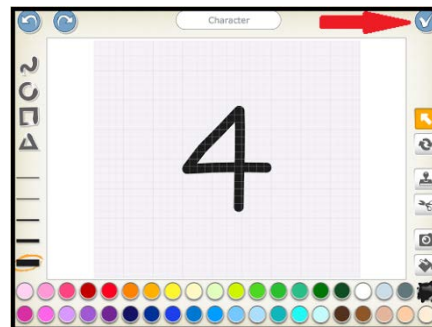
Select the free-form drawing tool and a thick line for drawing



Draw a number with your finger.



Select the check mark to save and continue



Repeat to make two more numbers for answer choices.



-
3. **Program the Cats:** Play a recording that asks “How many cats?” when you tap the cats.
 - a. Trigger an action when the cats are touched.



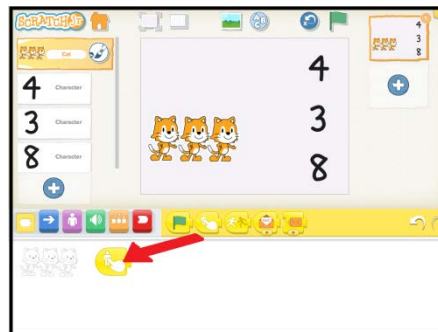


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Select the cats so that you can write a program for them, and select the yellow button to reveal the “triggering” blocks.



Select the “Start on Tap” block and drag it to the Programming Area.



b. Make a recording for the cats to play.

Select the green button from the Block Categories area to reveal the “sound” blocks.



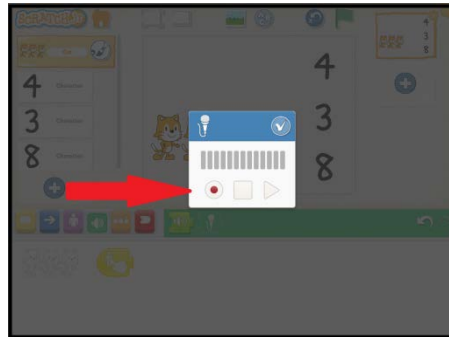
Select the “record” block



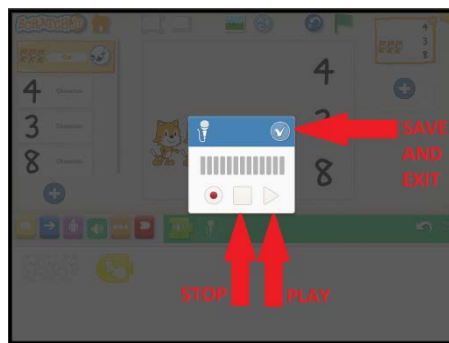


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Press the red “record” button to begin recording. Say “How many cats are there?”



Press the “record” button again (or the square “stop” button) to stop recording. To hear your recording, press the triangle “play” button. If you are satisfied with your recording, press the check to save and exit. If not, press the red record button to re-record.



c. Connect the recording to the action block. Once you have made a recording, you will see an extra green button with a number on a microphone. Drag it to your program area and connect it to the yellow button.



Press on the cats in the stage area to try it out. When you tap the cats, you should hear the sound that you recorded.





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4. Program the numbers: When the number is tapped, it should indicate whether it's a correct or incorrect answer.

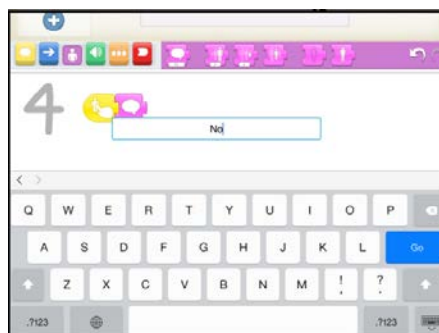
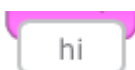
Select the purple “looks” category.



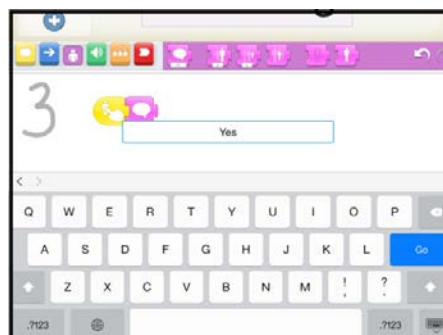
Select the “Say” block and drag it to the Programming Area.



Tap on the white area at the bottom of the “Say” block to change the word from “hi” to “no.”



Repeat for the other numbers, and make sure to have the correct answer say “yes”.





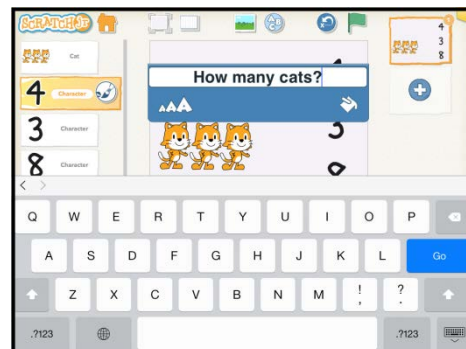
Counting and Cardinality

5. Make a title to indicate what to do, in case the user doesn't tap the cats first.

Tap on the letter icon at the top of the screen to insert a title.



Enter the instruction, such as "How many cats?" and then press "Go."



6. Extension: Animate the number that is the correct answer.

Add blocks from the blue or purple categories to the end of your script. Some possibilities are wiggle, jump, and grow/shrink.

