SKETCH & GUESS: PART 4

In Part 4, you will add answer-checking to the sketching app.

SEQUENCE OF EVENTS

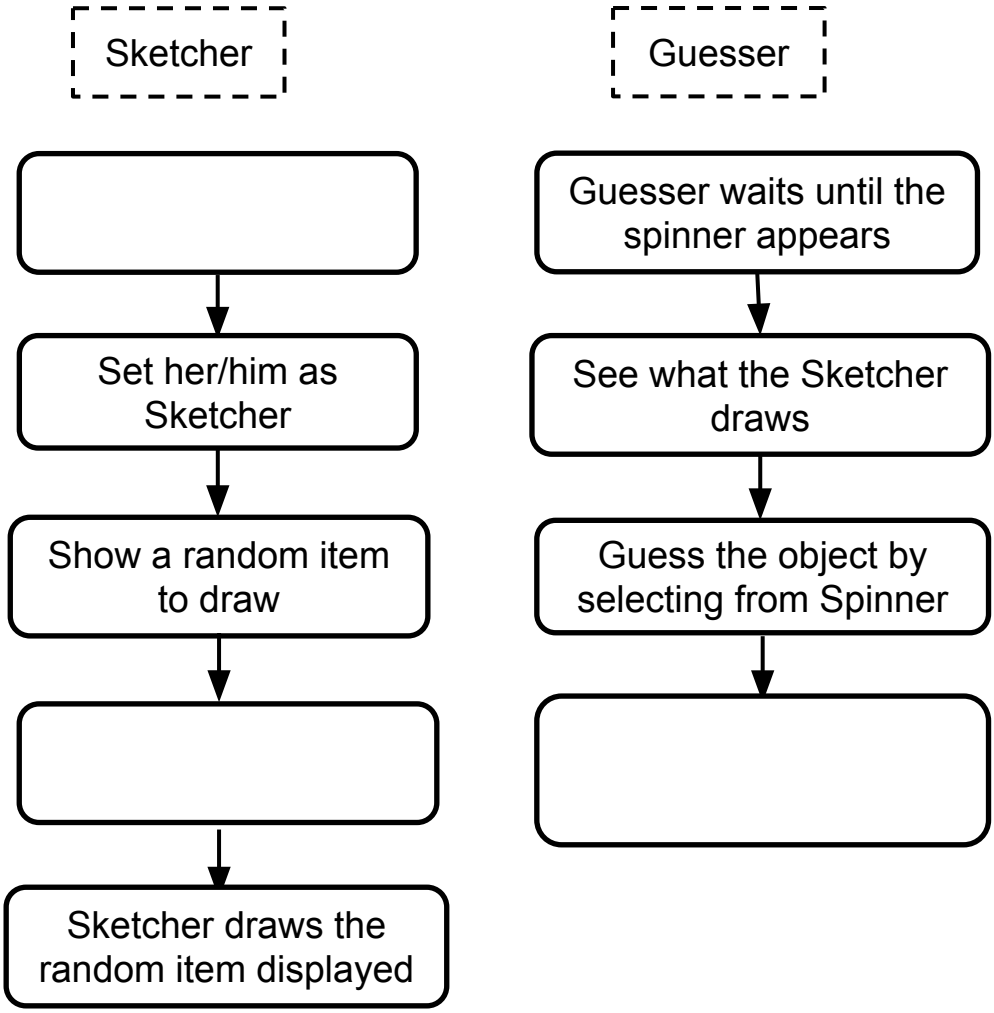
In previous lessons, you built a Sketch and Guess app.

Review with your partner the diagram below. Fill in the empty spaces with A, B, or C.

A. Check whether the selected answer is correct

B. Store the randomly selected drawing item in CloudDB

C. Sketcher presses Start Game button



CLOUDDB TAGS

The Sketcher needs to send the correct answer to the Guesser so the Guesser can check if their guess is correct. You'll do this by storing the correct answer in CloudDB using a new tag, "CurrentDrawing".

See the table below for the tags that are used in this app.

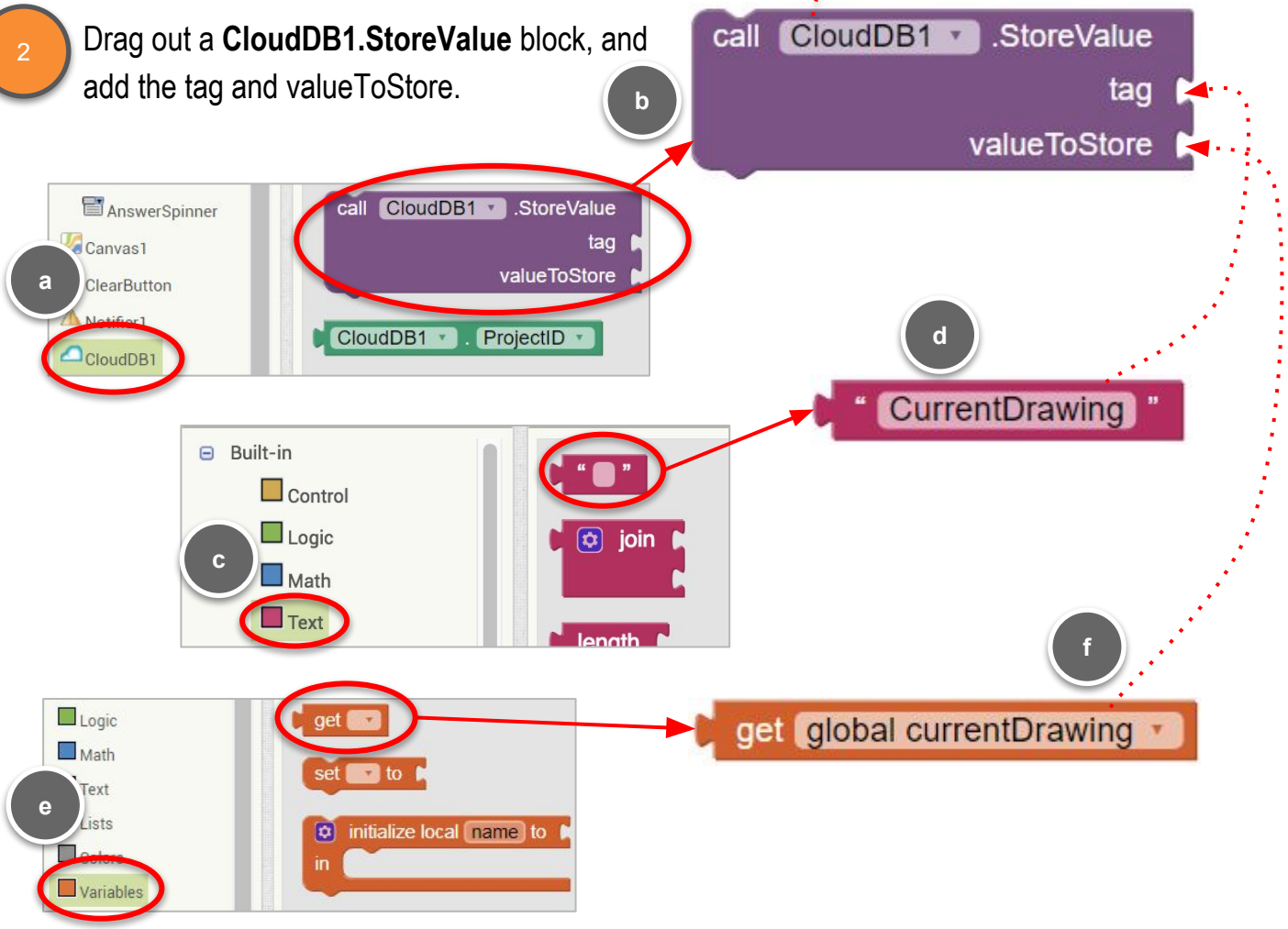
Tags	Meaning	Sketcher	Guesser
	The start point and end point for drawing	Store the coordinates of drawing	Get the coordinates of drawing
	Who is the Sketcher	Store their userID	Get the Sketcher's userID
	What is being drawn	Store the randomly generated item to draw	Get the item being drawn for answer checking

STORE CURRENT DRAWING

When the Sketcher clicks the Start button, you need to store the randomly generated drawing item to CloudDB. You'll use the tag, "CurrentDrawing".

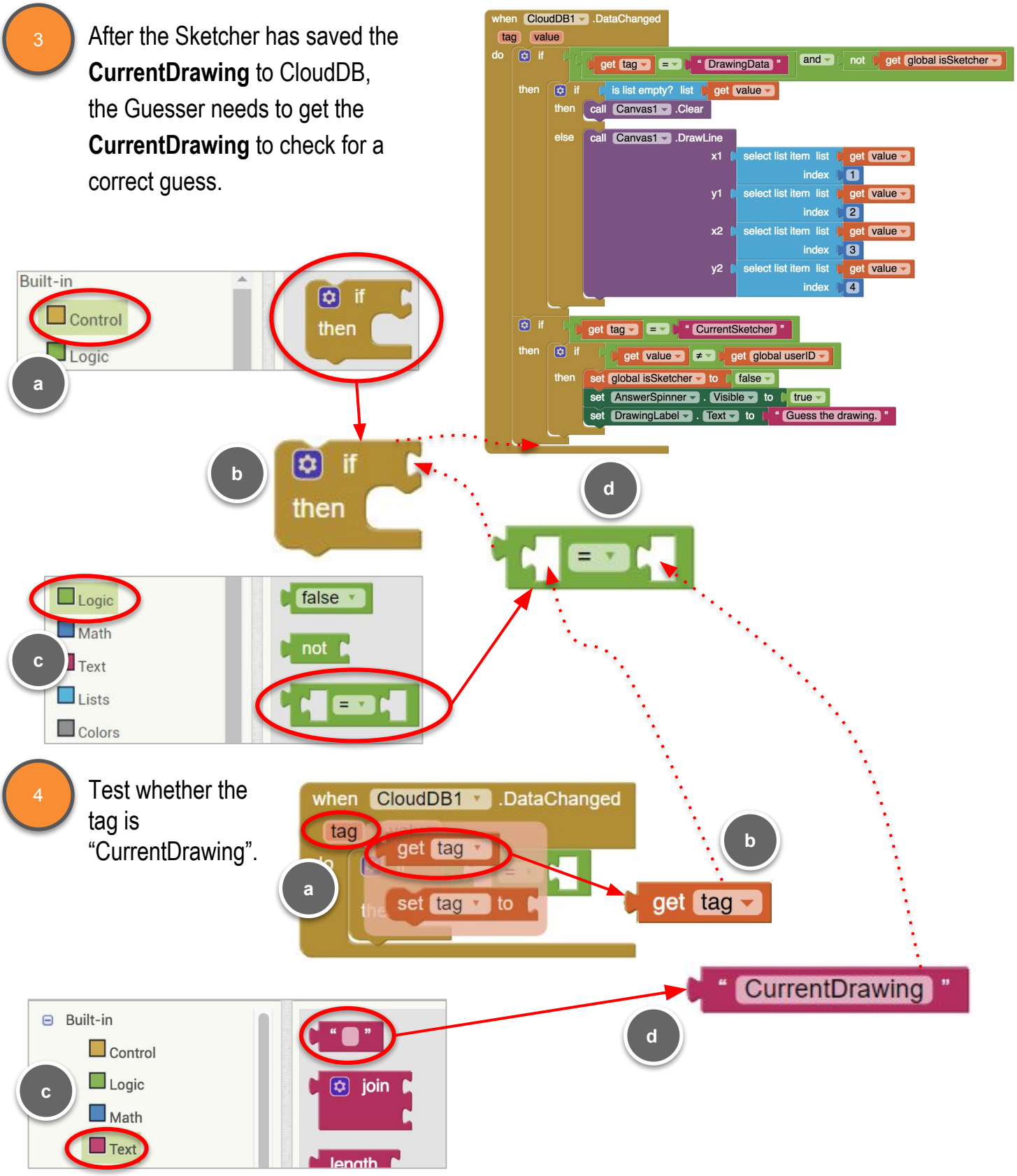
1. Open your project from Part 3.

2. Drag out a **CloudDB1.StoreValue** block, and add the tag and valueToStore.



GET CURRENTDRAWING FOR THE GUESSER

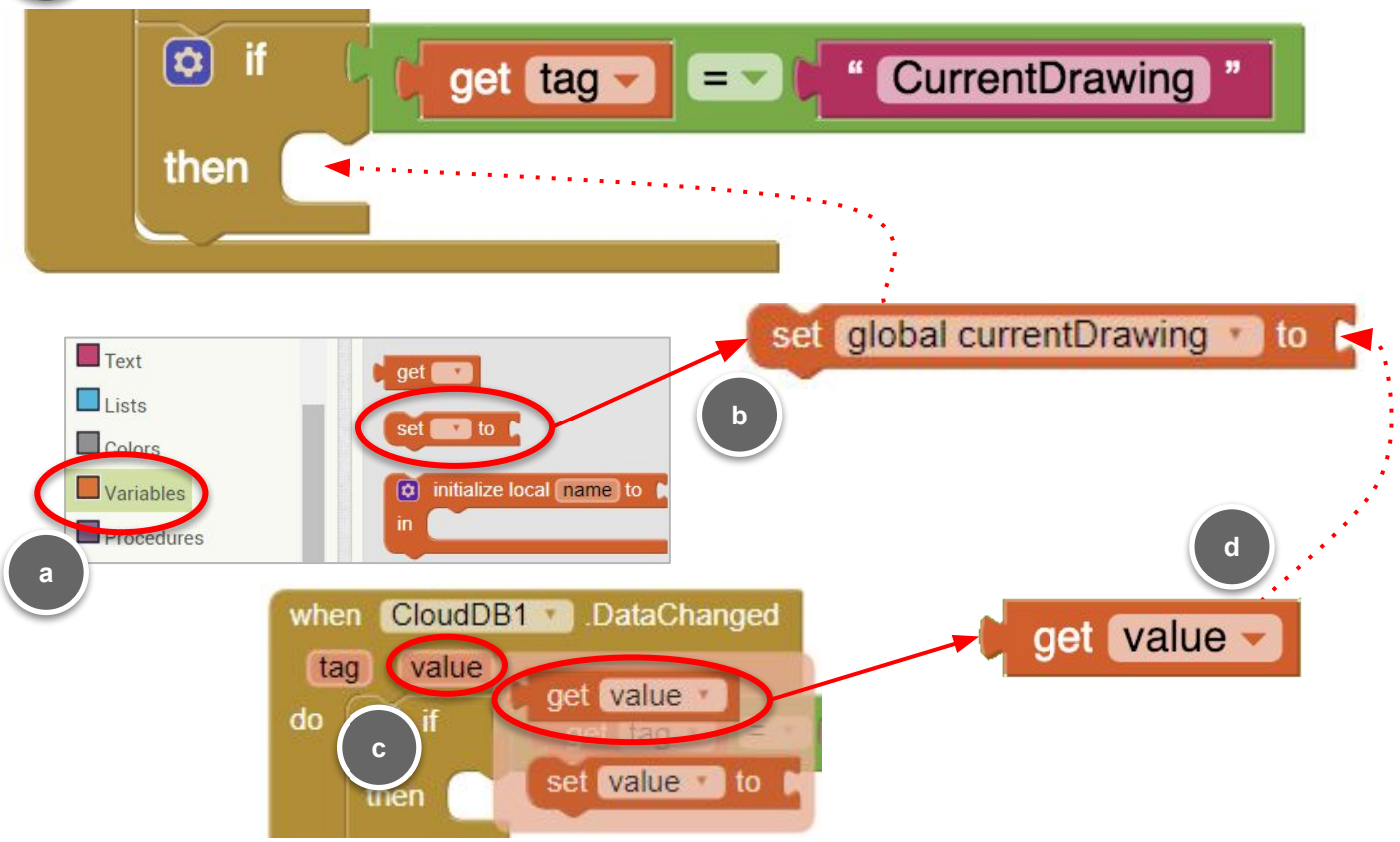
3 After the Sketcher has saved the **CurrentDrawing** to CloudDB, the Guesser needs to get the **CurrentDrawing** to check for a correct guess.



4 Test whether the tag is "CurrentDrawing".

SET THE ANSWER FOR CHECKING

5 Set the **currentDrawing** variable to the value received from CloudDB.



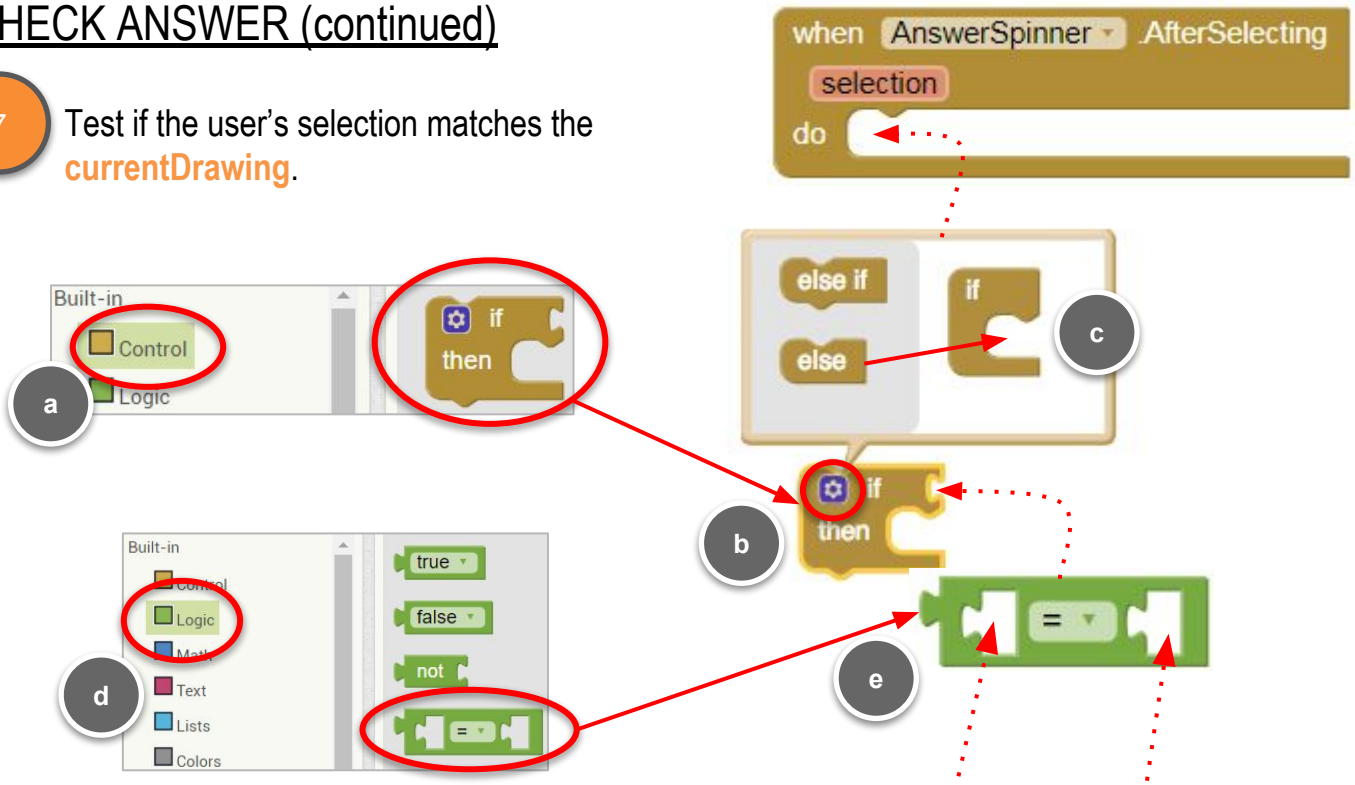
CHECK ANSWER

Check if the answer that the Guesser selects from the **AnswerSpinner** is correct, and notify the user.

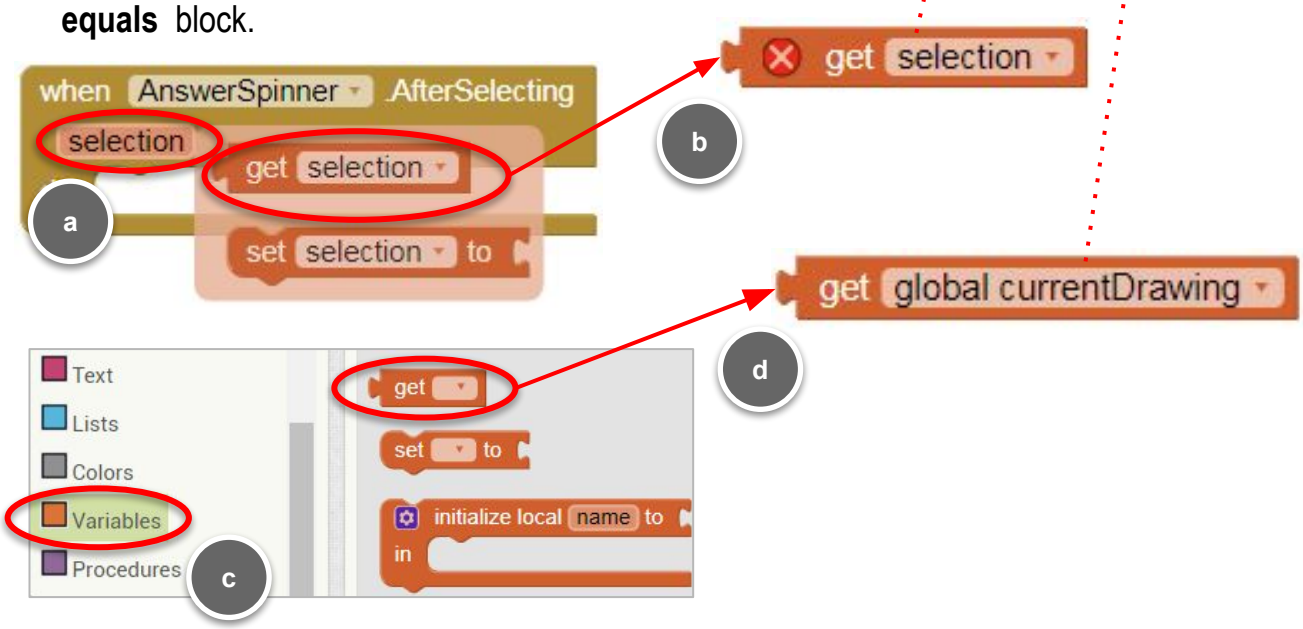
6 Check the answer in the **AnswerSpinner.AfterSelecting** block.

CHECK ANSWER (continued)

7 Test if the user's selection matches the **currentDrawing**.

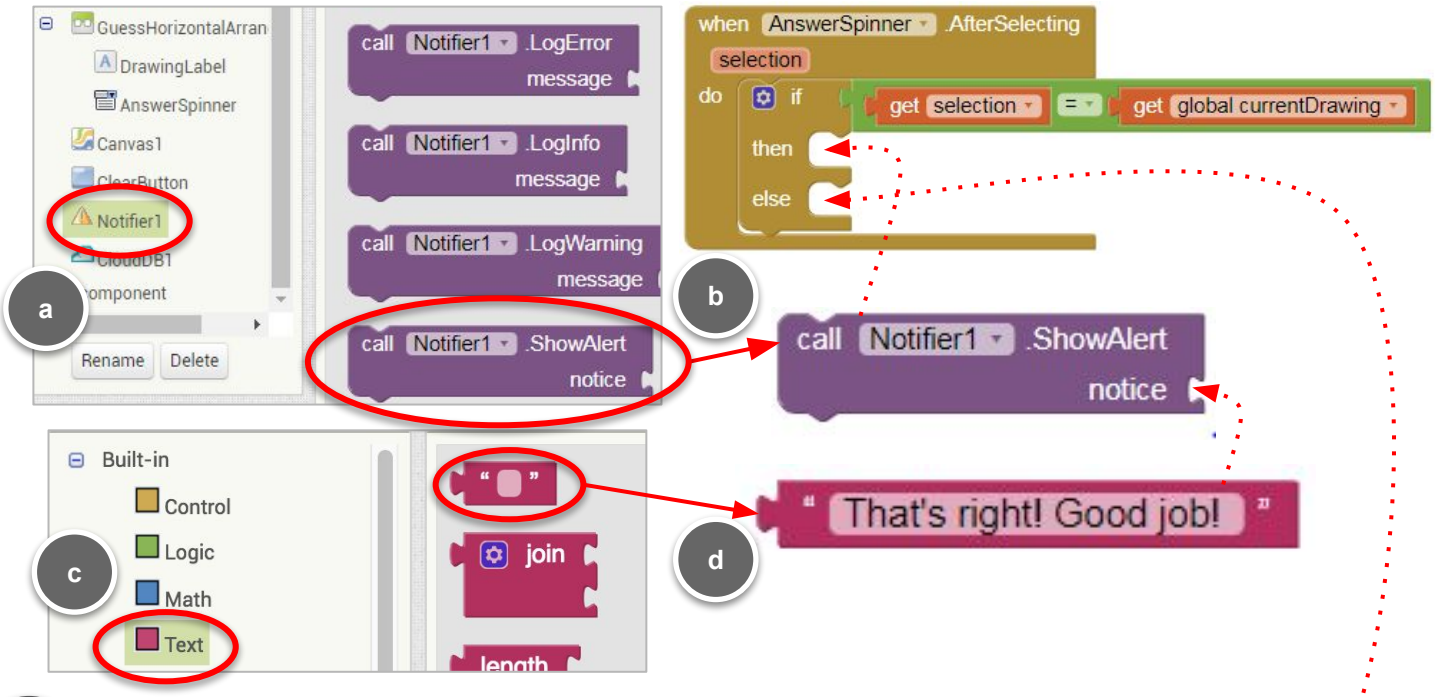


8 Snap a **get selection** and a **get global current Drawing** block into the **equals** block.



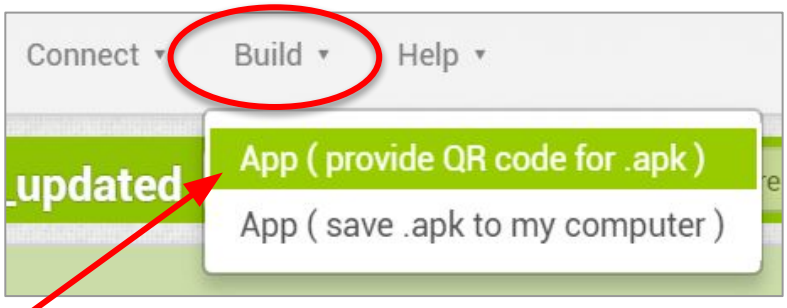
CHECK ANSWER (continued)

9 Drag out a **Notifier1.ShowAlert** block and set the messages. If the user's selection in the **AnswerSpinner** matches **currentDrawing**, notify the user that they are correct: *"That's right! Good job!"*; otherwise, notify user *"Oh no! Try again!"*.



10 Duplicate the **Notifier1.ShowAlert** block, change the text block to "Oh no! Try again!,, and add it as the else clause of the **if-then-else** block.

11 Test with your partner. Build the apk using the QR code option, scan the QR code and download and install the apk on your individual devices.



Choose Ways to Extend Your App

Here are a few features you could add if you want to expand your app

Add TextToSpeech to speak what is to be drawn

Add notification to all users if someone guesses correctly

Keep score! Each player can keep track of their correct guesses!

What other ideas do you have?

COMPUTATIONAL THINKING CONCEPTS

Sketch And Guess Part 4
1. Events 
2. Conditionals 
3. Naming / variables 
4. Manipulation of data and elementary data structures