

Variables in Scratch

Now that you know what variables are, let's see how we can use them in Scratch!

Activity 1—Talk to a Sprite!

LEVEL UP! 

Let's learn how to use a variable to talk to our sprites. Abby would love to meet you!

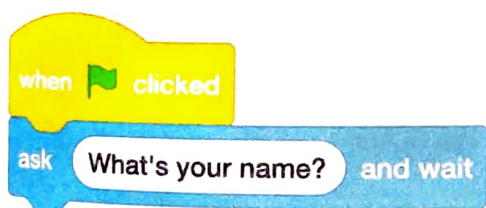
STEP 1

Select Abby from your sprite library.



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STEP 2

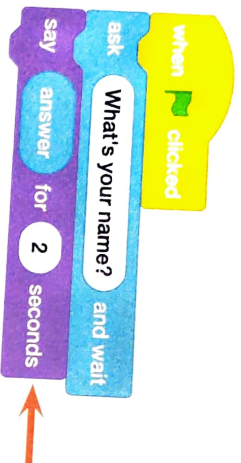


Start your new script for Abby by placing a *when flag clicked* event block and an *ask (__) and wait* sensing block. There is already a question in the block: "What's your name?" You can stick with that for now. Click the flag to run your program. You will notice that Abby asks you the question, and a box pops up in the bottom of the screen for you to type in your answer. After you type a response, click the checkmark to the right of the

answer

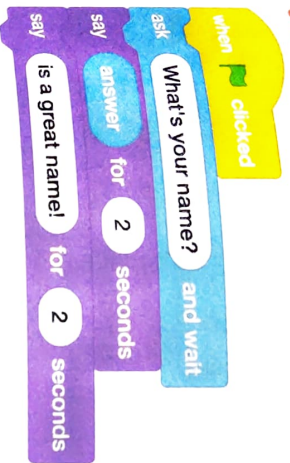
box or just hit return on your keyboard. Whatever you type into that box will be stored in the *answer* sensing block. This code block is also a variable since it is storing information for us.

STEP 3



To make Abby respond to us, add a *say () for 2 seconds* looks block. The code block says "Hello," but you can type over it to make the sprite say anything you want. In this case, drag your *answer* sensing block into the text bubble. It may take some practice, but you want to hover the *answer* sensing block over the text bubble and then release it to allow it to snap into place. Run your program and type your own name when Abby asks for it. Abby should repeat your name back because you stored it in your *answer* **variable**. Pretty cool, huh? Try typing something else. It can even be a whole phrase, like "Monkeys love bananas!" Abby will repeat it back to you.

STEP 4: CODE COMPLETE!



Let's make it more interesting. Add another *say* () *for 2 seconds* looks block and type "is a great name!" in the text bubble.

Now Abby should tell you that you have a great name! Thanks, Abby!

YOUR TURN!

Now that you've coded this activity, try challenging yourself to make the following changes:

- ☐ Program Abby to ask another question.
- ☐ Add movement and costume changes to make Abby more animated while she talks to you.
- ☐ Use the answer sensing block to program Abby to give a funny response.