

Name:

Date:

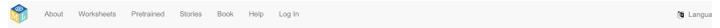
Class:

ML4K Tutorial

1. Go to [machinelearningforkids](https://machinelearningforkids.com)

2. Click on "Get started."

3. Click on "Log in."



Teach a computer to play a game

Get started Learn more

- 1 Collect examples of things you want to be able to recognise
- 2 Use the examples to train a computer to be able to recognise them
- 3 Make a game in Scratch that uses the computer's ability to recognise them

Already registered?

Log in

[Forgot your details?](#)

4. Use the login provided (if your teacher created an account).

Go to your Projects

5. Click on "Go to your projects."

6. Click on "Add a new project."

+ Add a new project

7. Add the following:

Project Name *

Glucose Index

Project Type *

recognising images

Storage *

In the cloud

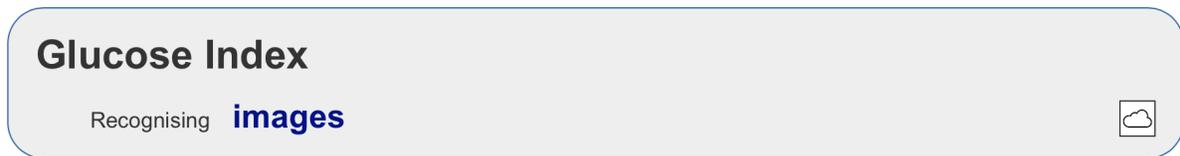
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Date:

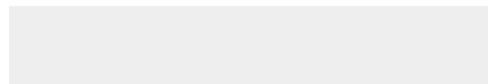
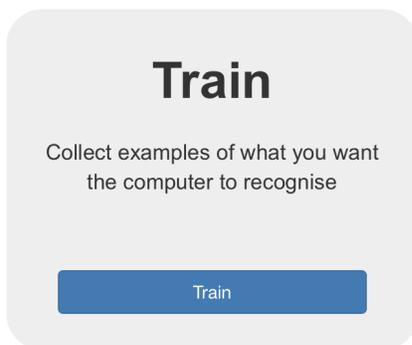
Class:

8. Click on "Create" at the right bottom of the page.

9. Click inside your project to open it.



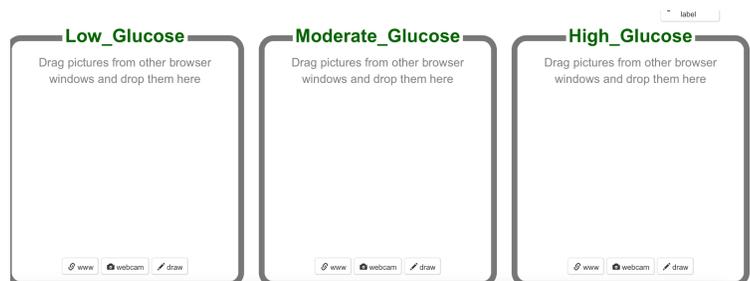
10. Click on "Train."



11. Add a new label.



12. Create these categories:

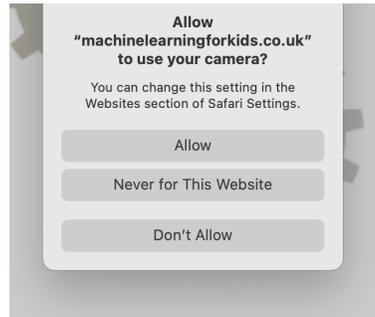


Name:

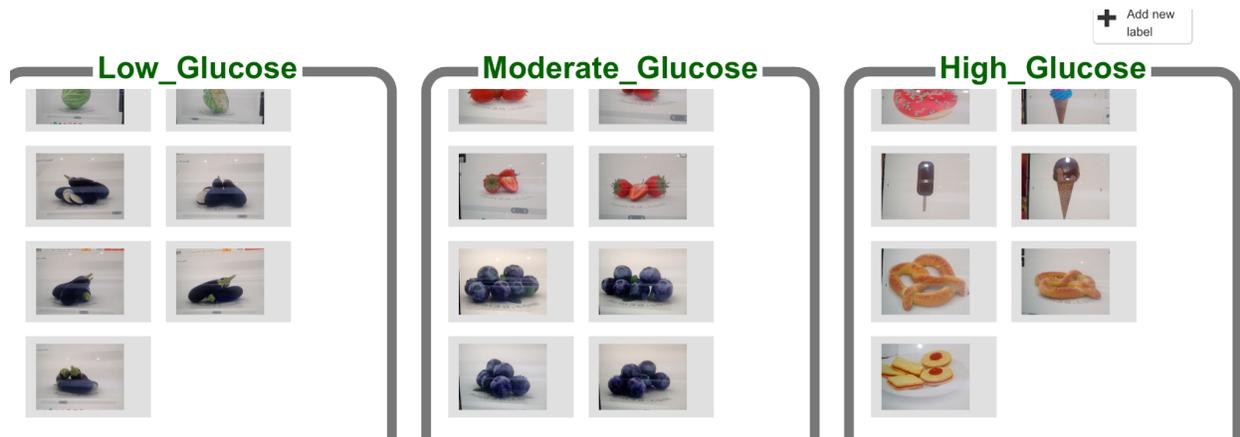
Date:

Class:

13. Click on the webcam and then on "Allow" to start adding pictures in the correct categories.



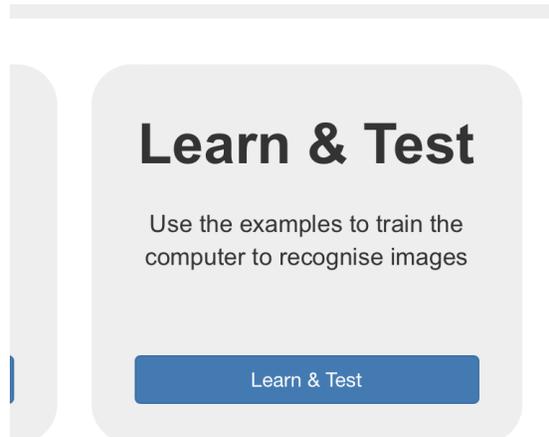
14. It will look like this:



15. Click on "Back to project."

[Back to project](#)

16. Click on "Learn & test."



Name:

Date:

Class:

Once finished, click on "Go back to project."

17. Click on "Train new machine learning model."

What have you done?

You have collected examples of images for a computer to use to recognise when images are Low_Glucose, Moderate_Glucose or High_Glucose.

You've collected:

- 25 examples of Low_Glucose,
- 24 examples of Moderate_Glucose,
- 13 examples of High_Glucose

18. Click on "Test with webcam" and hold a picture.

Info from training computer:

[Train new machine learning model](#)

19. Click on "Go back to project."

20. Click on "Make."

Make

the machine learning model you've trained to make game or app, in Scratch or Python

[Make](#)

21. Click on "Scratch 3."

[Back to project](#)

[Open in Scratch 3](#)

22. Click "Open in Scratch 3."

Your project will add these blocks to Scratch.

 recognise image image (label)

Put images in the input for this, and it will return the label that your machine learning model recognises it as.

 recognise image image (confidence)

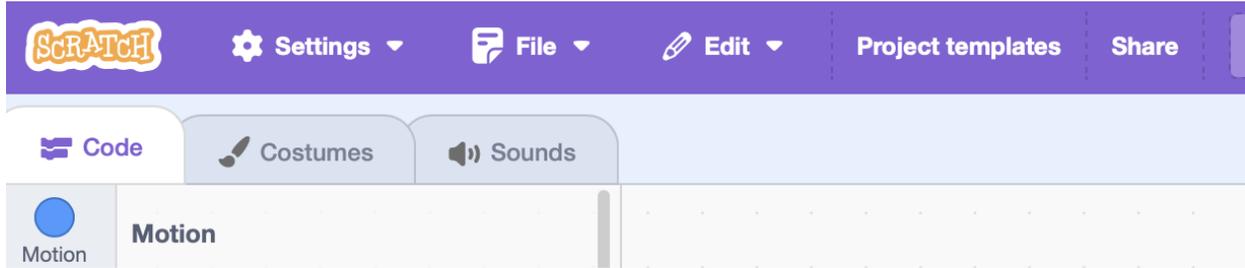
This will return how confident your machine learning model is that it recognises the type of images. (As a number from 0 - 100).

Name:

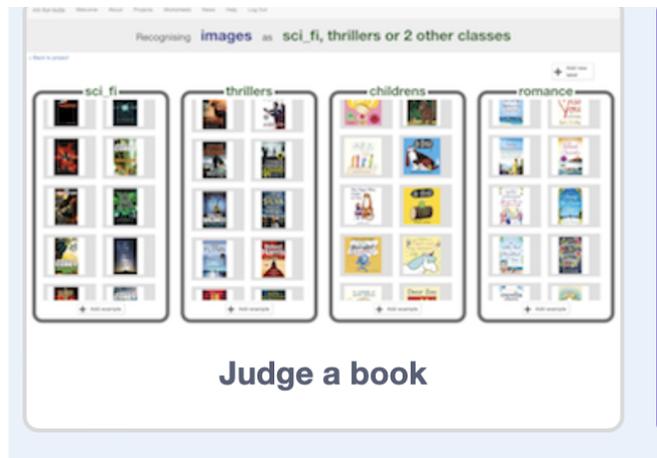
Date:

Class:

23. In Scratch, click on "Project templates."



24. Scroll down and find "Judge a book" tutorial.



25. Click on "Sci-fi" and then click on "Costume" on the top left to change the name to our category.

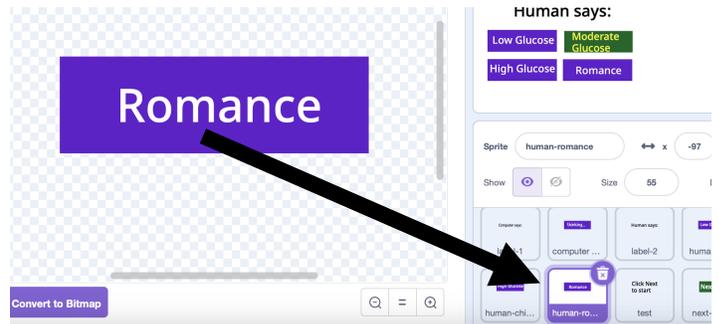


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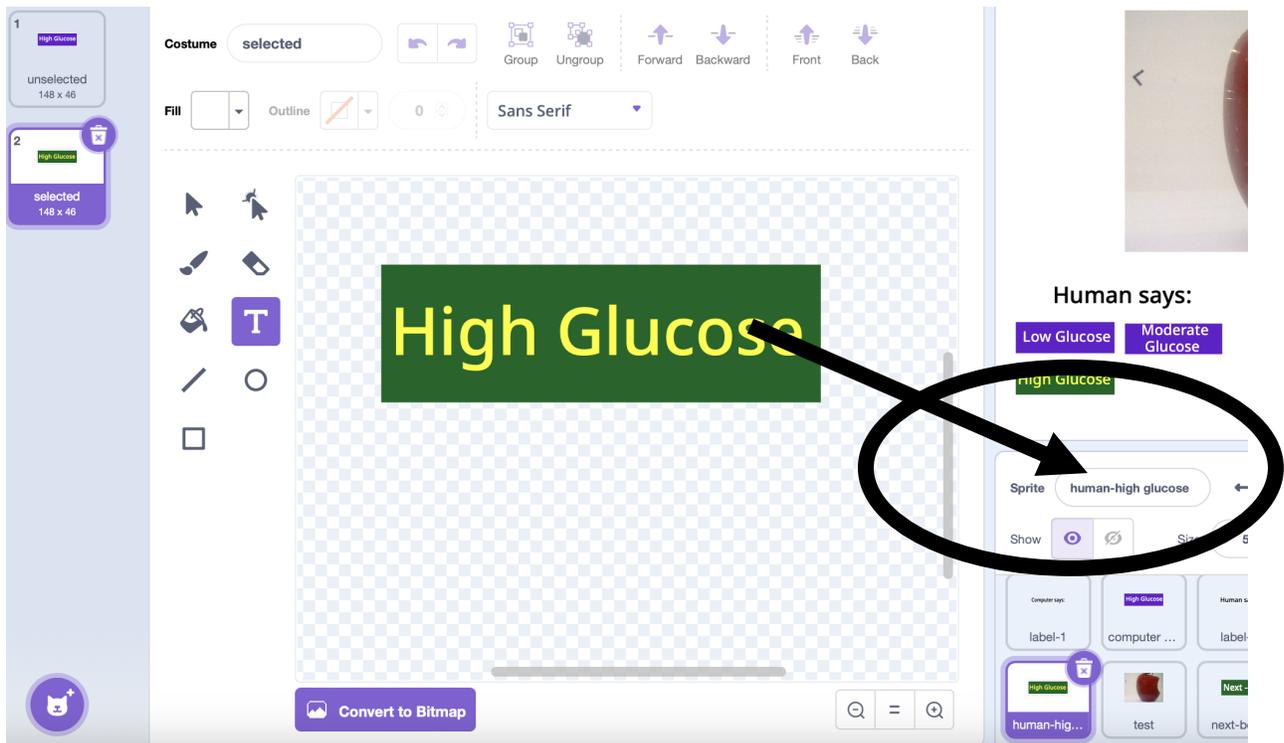
Date:

Class:

26. Rename all three and delete one.



Rename sprite too.

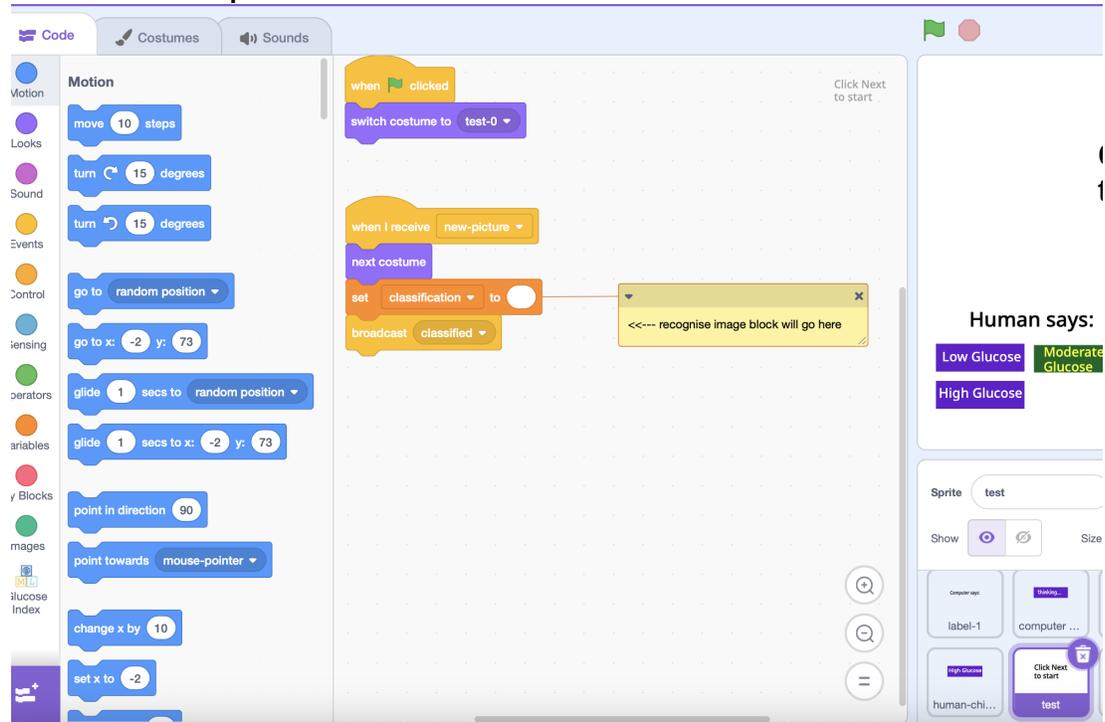


Name:

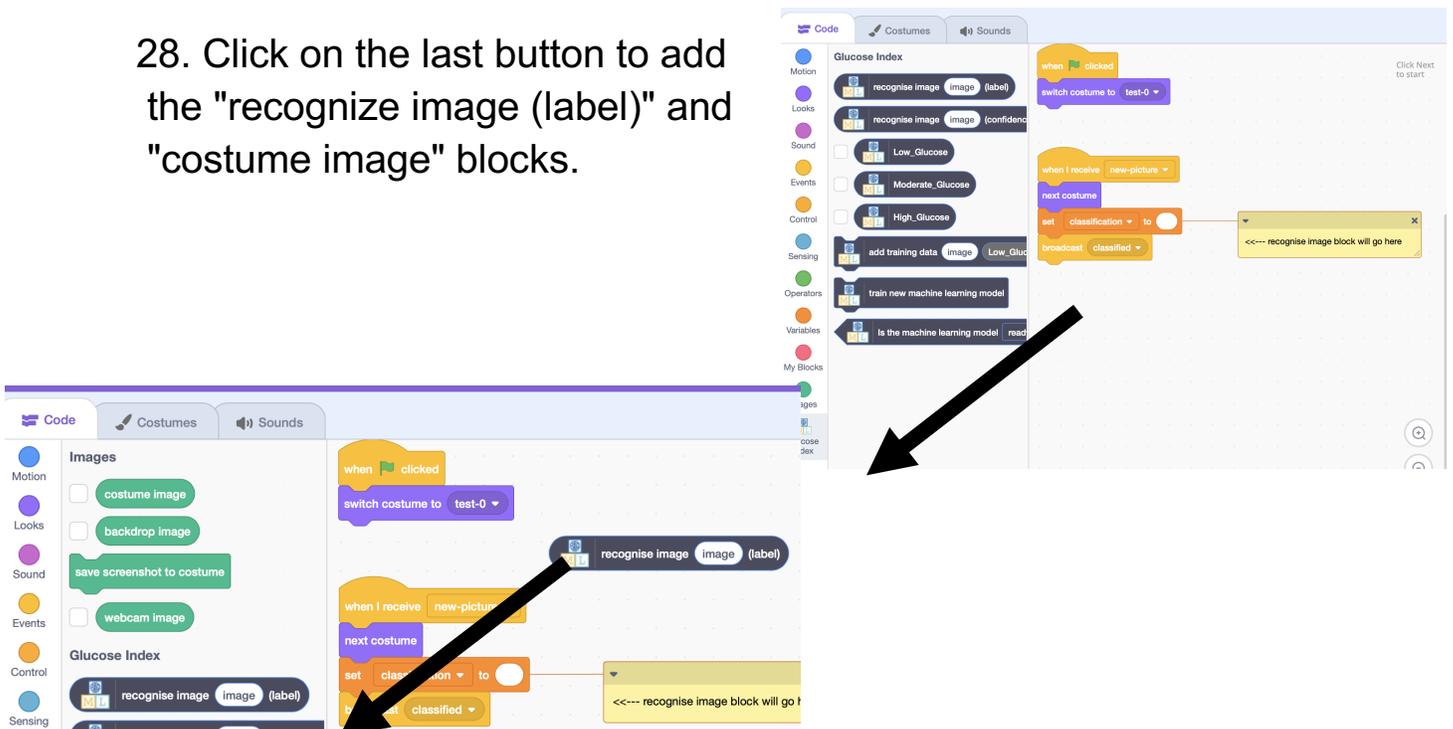
Date:

Class:

27. Click on the "test" sprite and "code."



28. Click on the last button to add the "recognize image (label)" and "costume image" blocks.

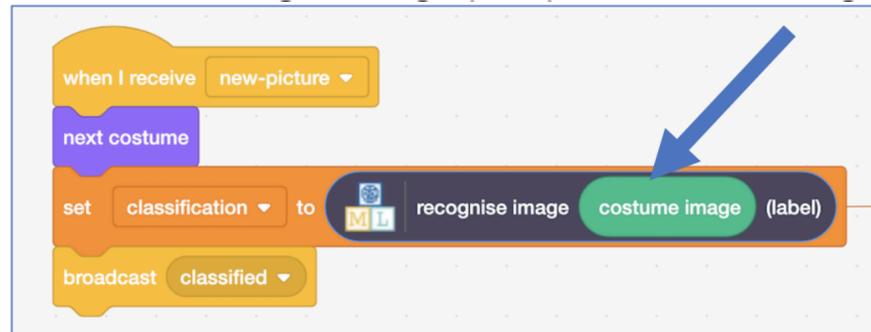


Name:

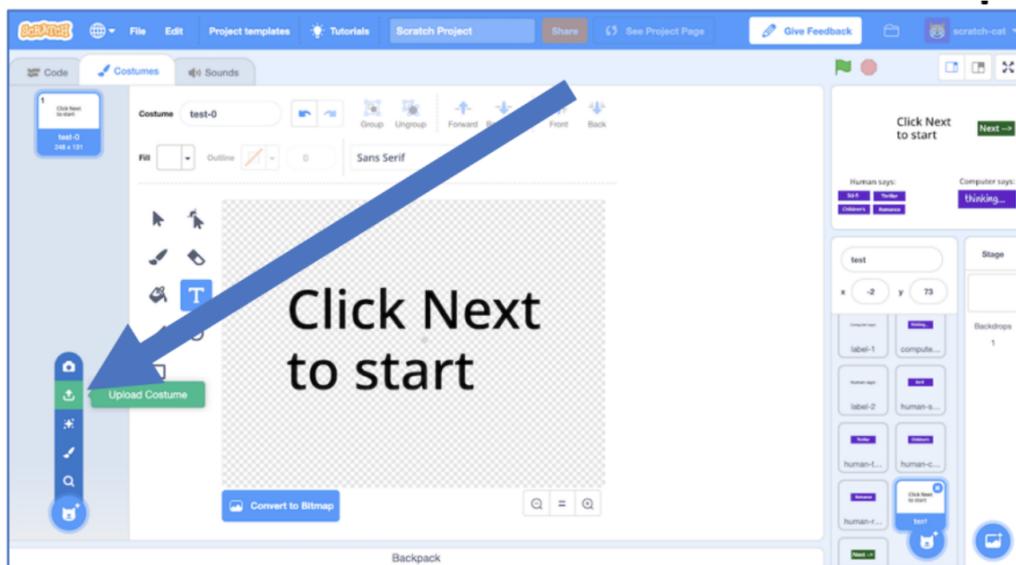
Date:

Class:

29. It will look like this:



30. Click the "Costume" tab and then click "Upload" costume.

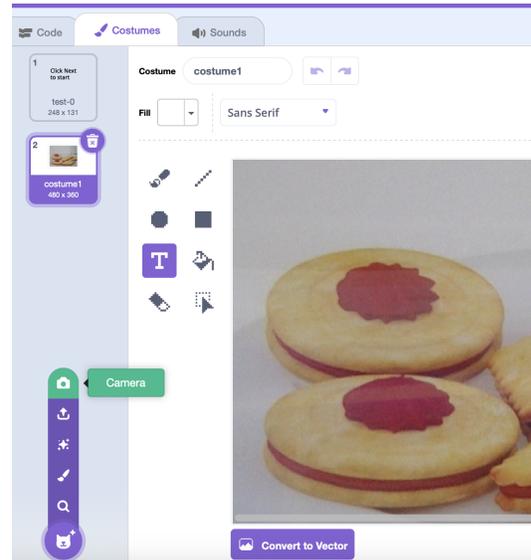


Name:

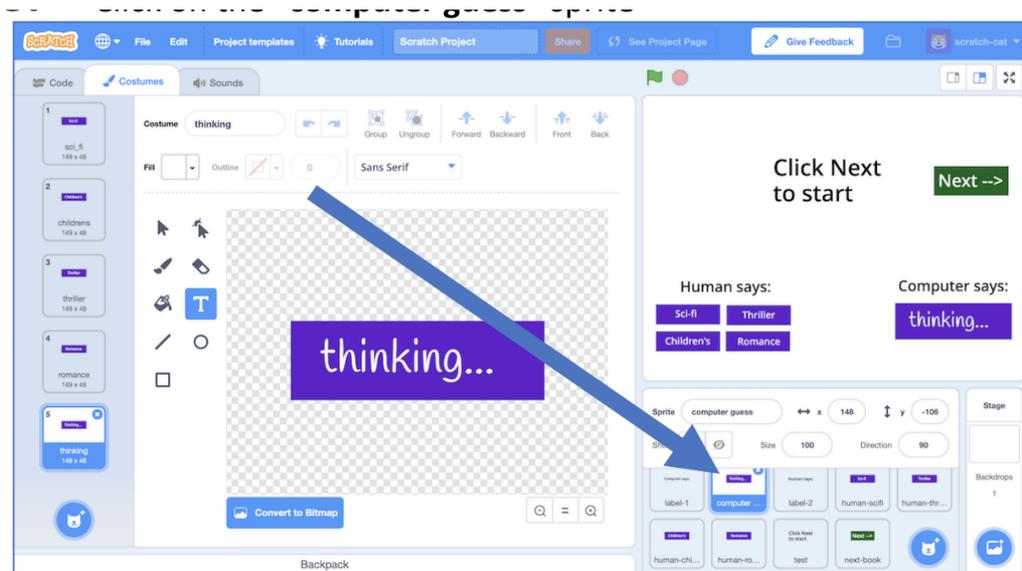
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31. Click on the "camera" and take pictures of foods you will find inside the envelope provided.



32. Click on "computer guess" sprite and click on Costume.

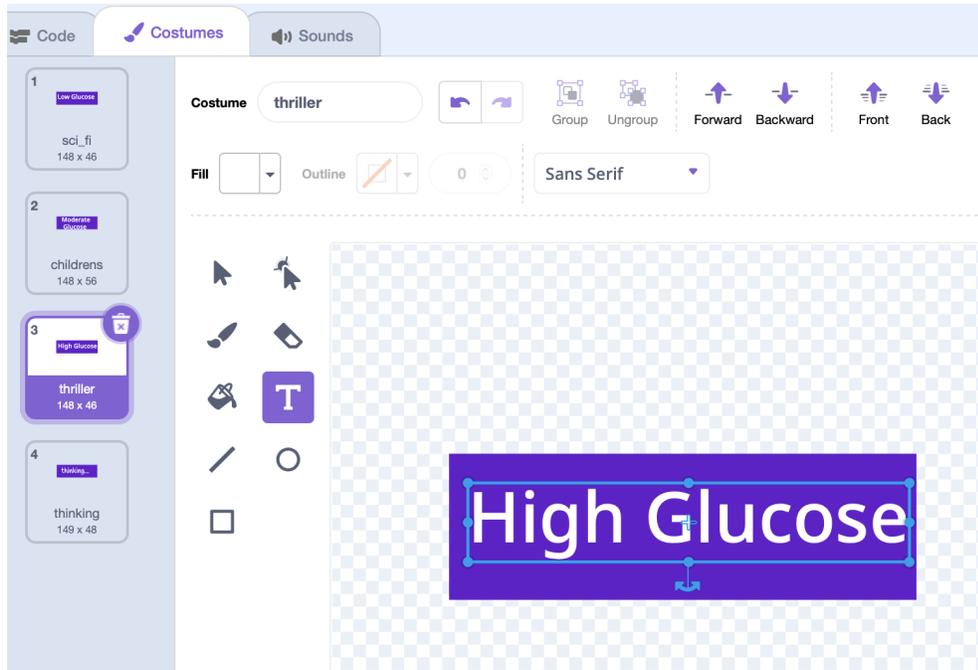


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33. Change the categories and delete the extra.



34. Then, click on Code and copy this code:

Run the code!

