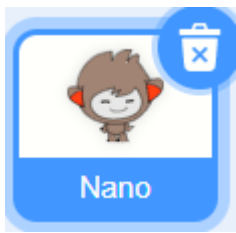


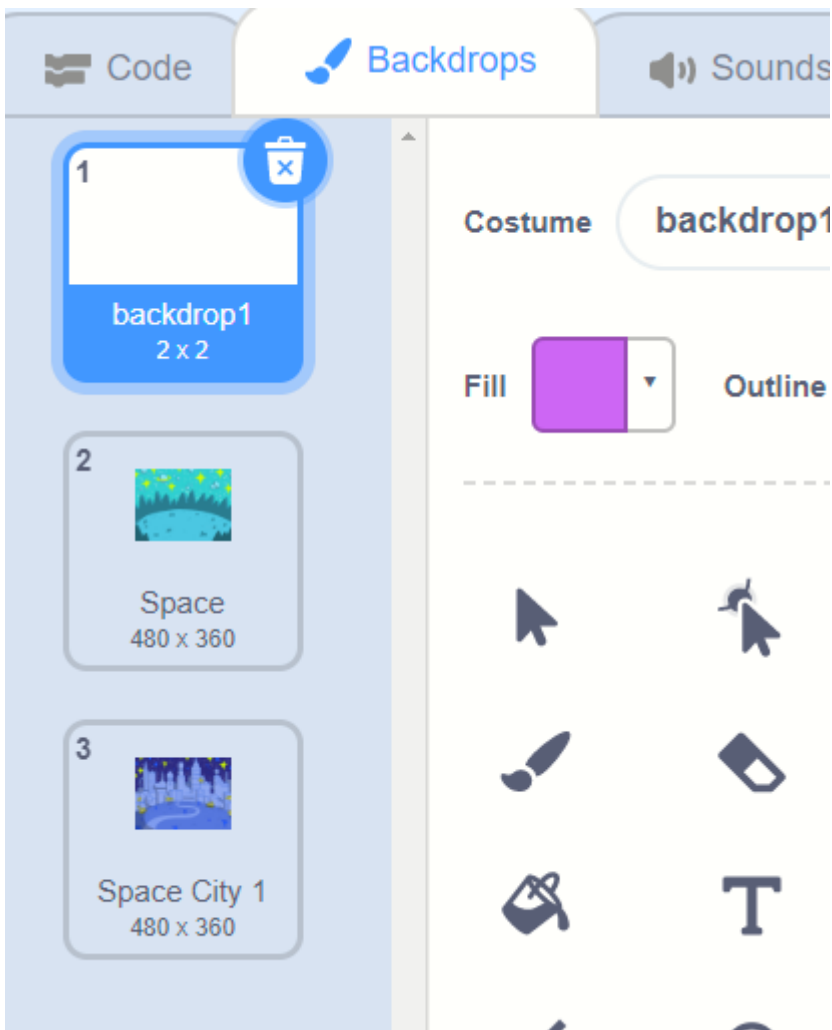
## Twenty Questions

This coding activity will show you how to create a twenty questions game. The sprite you choose will ask you twenty yes or no questions.

To start off with choose a sprite that has different costumes, you will use these to react to the answers you give it. I have chosen Nano as my sprite because it has 4 different costumes.

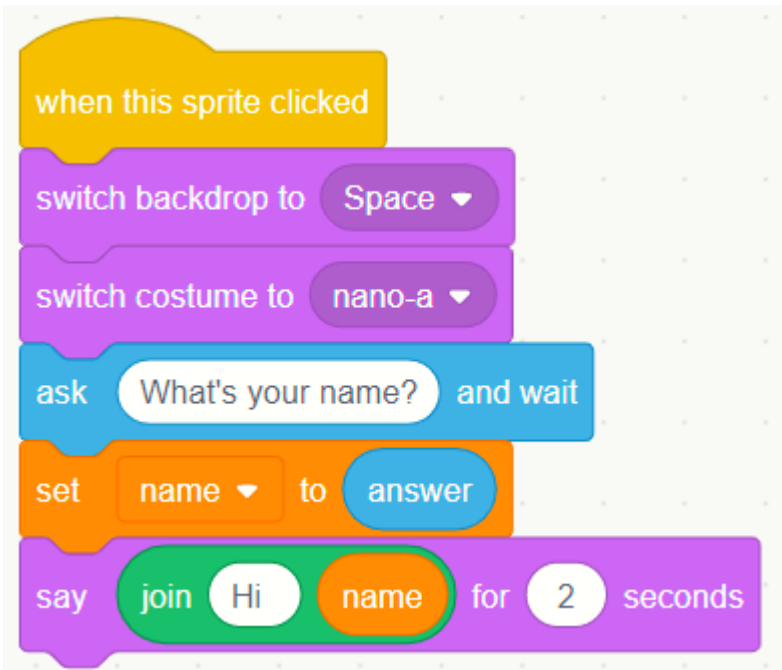


Next choose your backdrop, make sure you choose two or more as we will be changing locations as part of the game. Don't forget to delete the blank background, to do this select the stage at the bottom right hand side of the screen and then choose background tab next to the code tab (top left hand corner)



The first bit of code to add to the sprite will be a question and make sure your backdrop and sprite will reset when the game restarts.

Start with the following code:



```
when this sprite clicked
  switch backdrop to Space
  switch costume to nano-a
  ask What's your name? and wait
  set name to answer
  say join Hi name for 2 seconds
```

The switch backdrop and switch costume can be found on the looks code scripts.

The ask code block can be found in the sensing code scripts.

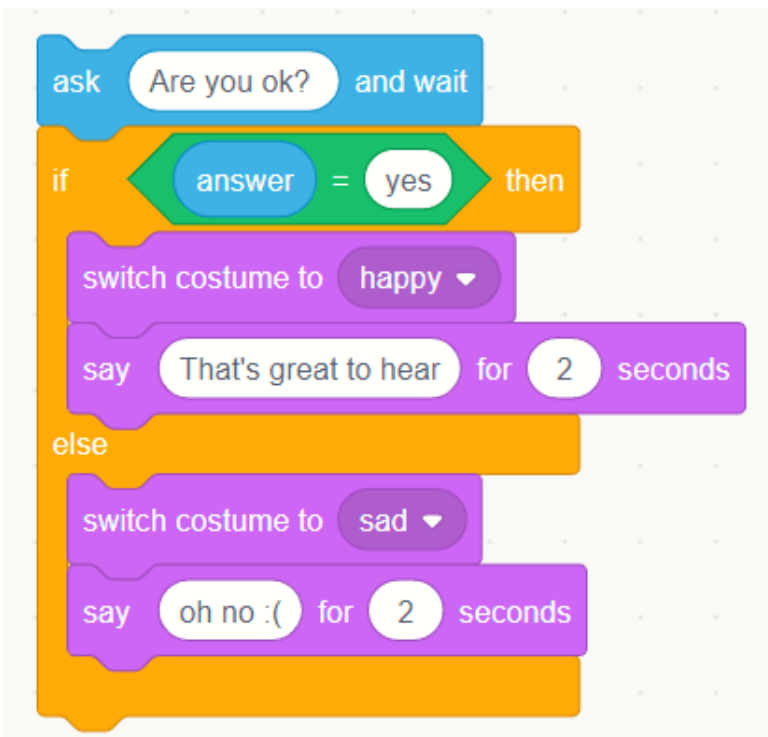
Create a new variable called name for all sprites. Set your variable to name and drag and drop it under the blue code. You can find the blue 'answer' code block in sensing, and drop it into the space in the variable block.

Next add a say block, from the looks script and add it under the variable code. To make the code respond to your answer find the joining block in operators and add it to the say code.

Change the first word to Hi and then hit the space bar. Next find the name block in the variable script.

Test your code, make sure to save your progress.

The next bit of code joins to the code you have just made.



```
ask Are you ok? and wait
if answer = yes then
  switch costume to happy
  say That's great to hear for 2 seconds
else
  switch costume to sad
  say oh no :( for 2 seconds
```

The code creates the question and answers the sprite will ask you. You can duplicate this code to ask more questions, get as creative as you like!

This code will change your sprites looks to react to your answers. The code uses scripts from the control code (orange), the sensing code (blue) and the operator codes (green).

Use this same code to ask more yes or no questions, you can even change locations using a similar code. Just make sure the code joins the rest of the 'when sprite clicked code'

If you want to change the location of your sprite, add code from the purple looks code script and choose a different background from the options. Test your code out and see if the background location changes or stays the same if you answer anything other than yes.

If you want to ask a more difficult question, or one that cannot be answered you can use the following code.

```
ask Do you want to come to the city? and wait
if answer = yes then
  switch backdrop to Space City 1
else
  ask Do you like ice cream? and wait
  if answer = yes then
    ask What is your favorite flavor of ice cream? and wait
    if answer = strawberry then
      say Yum! That's one of my favorites for 2 seconds
    else
      say I think I love all ice cream flavors! for 2 seconds
      say Except licorice! for 2 seconds
      switch costume to nano-c
    else
      say That's ok! for 2 seconds
      ask Whats your favorite food? and wait
      say join I've never tried that before answer for 2 seconds
```

It's really up to you how complicated you want to make your questions, the best part about this program is you can duplicate and edit the code to ask more questions. Have fun!





