

# Scratch 2.0: Introduction

1

I can...

- Use sensing commands
- Understand IF statements
- Experiment with effects



Sensing

IF Statements

Effects

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Computer Creations

# Starter

Complete the  
Scratch Word  
Search

**Scratch: Word Search**

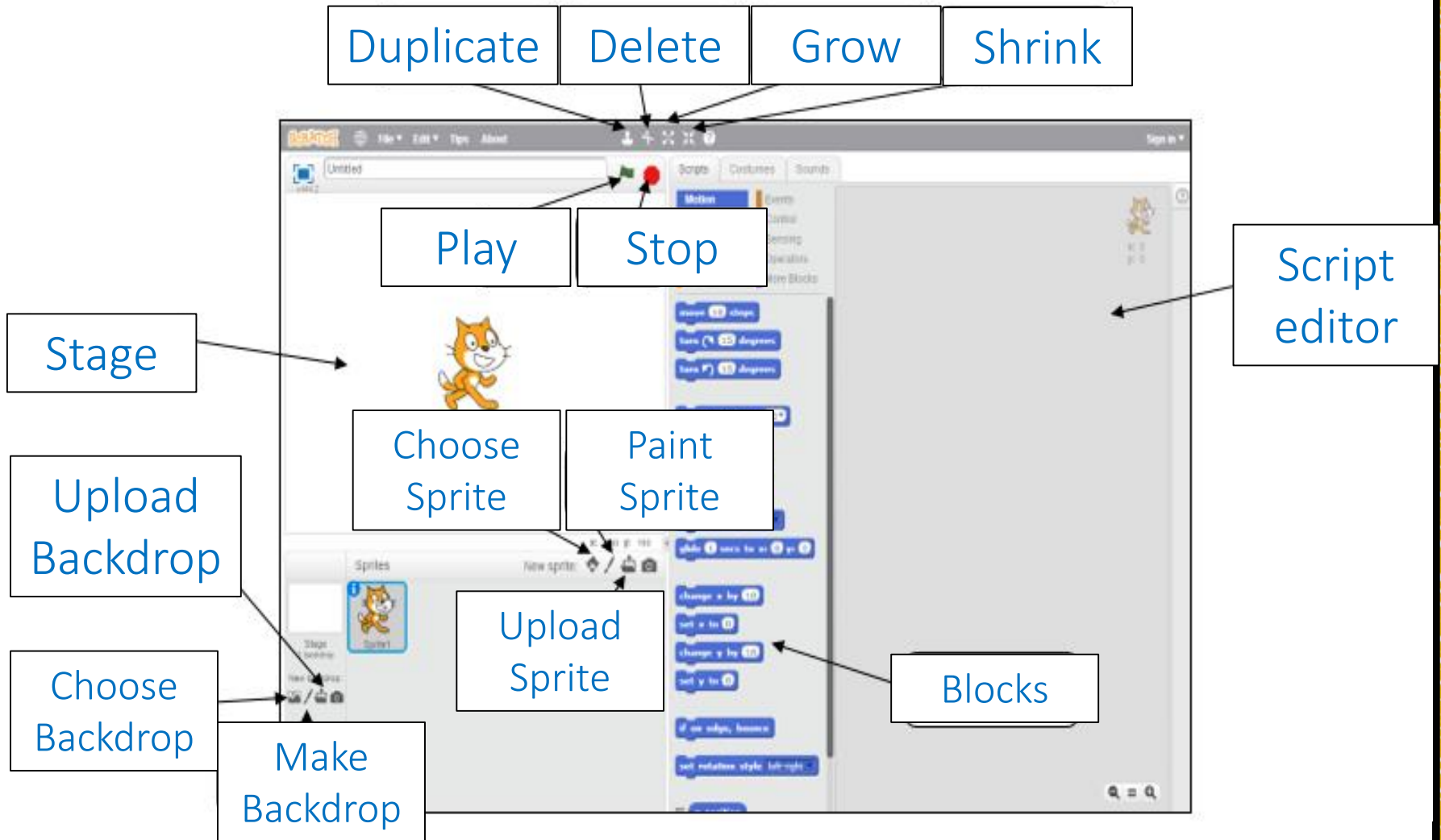
Find the words in the grid below

ANIMATION HIDE PEN SCRATCH MOTION GLIDE  
BLOCKS IMPORT QUIT SPRITE NUMBER FLAG  
CONTROL DUPLICATE REST VARIABLE LOOKS STAGE

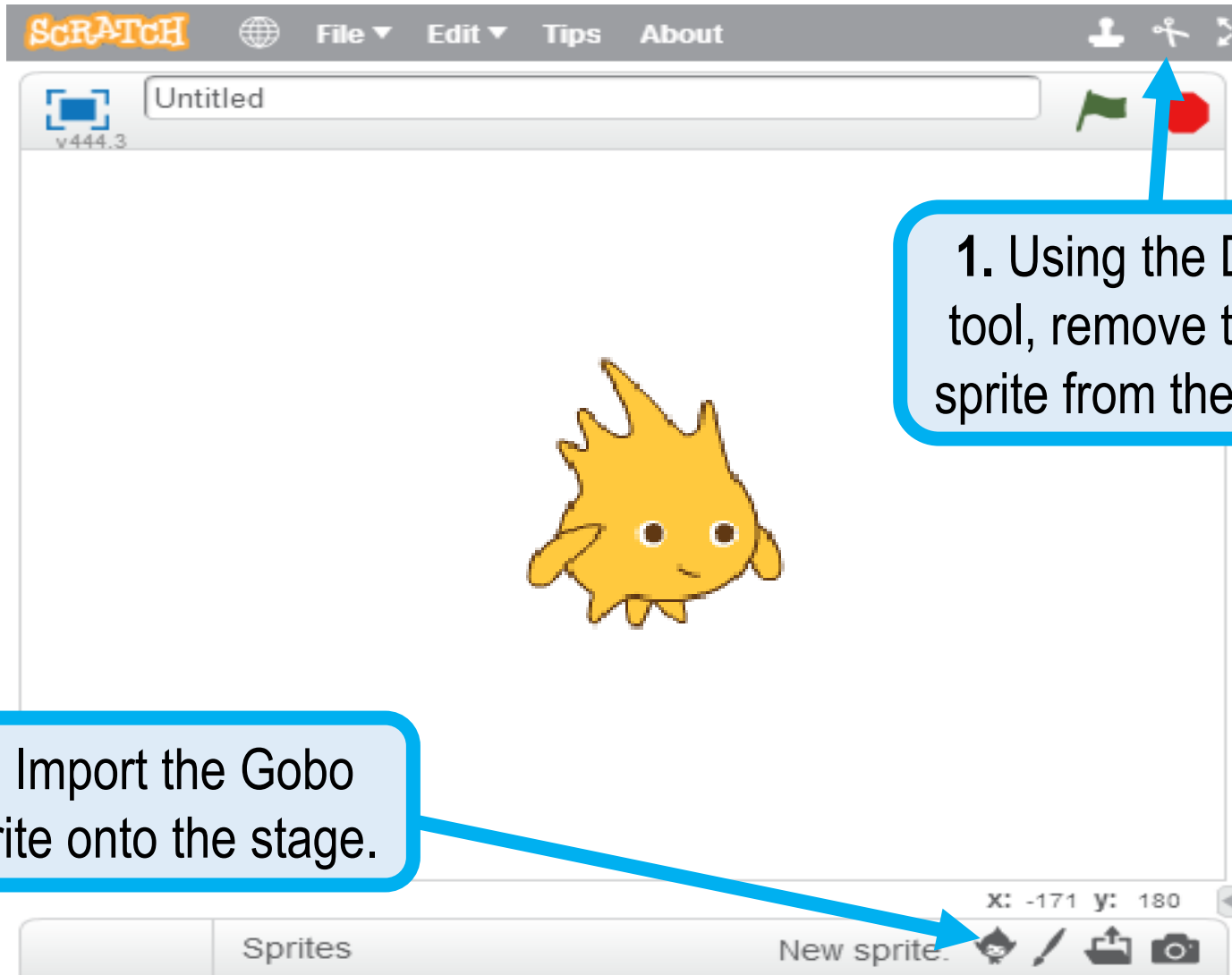
F	U	N	C	T	I	O	N	G	R	I	O	P	E	R	A	T	O	R	I	H	C
P	Z	E	E	X	P	O	R	T	A	T	E	T	R	E	S	T	R	T	G	T	U
E	D	G	G	X	A	I	C	A	B	R	C	P	E	A	C	O	E	L	D	I	R
R	T	J	A	F	W	B	L	O	C	K	S	D	O	R	R	E	E	X	Y	M	T
C	O	N	T	R	O	L	C	B	R	F	L	S	E	T	A	C	I	L	P	U	D
E	L	R	S	K	M	V	T	F	L	A	G	N	L	P	T	M	N	L	N	O	U
N	U	Q	S	R	K	U	B	H	A	F	U	M	O	E	C	E	O	D	C	R	P
T	K	U	O	N	J	A	N	I	M	A	T	I	O	N	H	R	S	I	I	T	M
A	L	I	F	A	U	O	O	S	U	R	A	G	K	R	T	U	E	L	O	Y	O
G	O	T	H	N	R	X	I	S	O	A	L	O	S	Q	Q	D	R	B	T	P	T
E	R	Y	O	T	H	K	H	P	A	I	I	D	E	L	I	O	X	G	M	D	I
T	T	B	N	T	B	S	M	D	D	T	O	V	I	H	U	G	F	V	A	U	O
U	N	O	S	P	R	I	T	E	I	O	N	E	U	E	O	G	R	I	O	I	N
I	C	M	D	E	V	A	N	W	V	A	R	I	A	B	L	E	C	I	X	H	T

SCRATCH

# Task 1: Scratch Interface



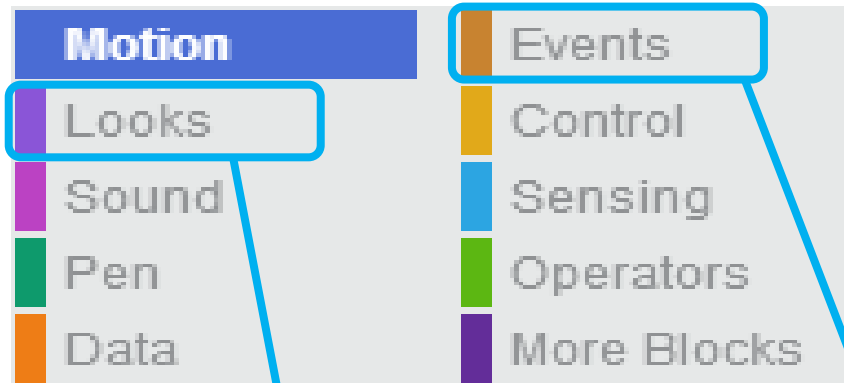
# Task 2: Play with Effects



1. Using the Delete tool, remove the cat sprite from the stage.

2. Import the Gobo sprite onto the stage.

# Task 2: Play with Effects



3. Add the following blocks onto the Gobo sprite.



# Task 2: Play with Effects

change

color

25

color  
fisheye  
whirl  
pixelate  
mosaic  
brightness  
ghost

4. Experiment with each effect to see what it does.

# Task 2: Play with Effects

Effect	What happened
Color	
Fisheye	
Whirl	
Pixelate	
Mosaic	
Brightness	
Ghost	

5. Complete the following table on your worksheet.

# Task 3: Talking to Scratch



```
when this sprite clicked
ask How old are you? and wait
say I'm for 1 secs
say answer for 1 secs
say too! for 1 secs
```

1. Add a sprite of your choice on the stage and add the following blocks to it.



# Task 3: Talking to Scratch

```
when this sprite clicked
ask How old are you? and wait
say I'm for 1 secs
say answer for 1 secs
say too! for 1 secs
```

What happens here?

What is stored inside the block called answer?

2. Answer the questions on your worksheet.

# Task 3: Talking to Scratch

3. Remove the blocks from the previous slide and now add the ones shown.

There are 4 possible choices in these blocks of code.

```
when green flag clicked
clear graphic effects
ask "what effect would you like?" and wait
if answer = color then
  change color effect by 50
if answer = fisheye then
  change fisheye effect by 50
if answer = whirl then
  change whirl effect by 50
if answer = pixelate then
  change pixelate effect by 25
```

The image shows a Scratch script starting with a 'when green flag clicked' event block. This is followed by a 'clear graphic effects' block. Then, an 'ask' block prompts the user with 'what effect would you like?' and waits for an answer. Below this are four conditional 'if' blocks. Each 'if' block checks if the user's answer matches a specific effect name: 'color', 'fisheye', 'whirl', and 'pixelate'. If the answer matches, a corresponding 'change effect by' block is executed, increasing the effect's value by 50 for 'color', 'fisheye', and 'whirl', and by 25 for 'pixelate'. A red bracket on the left side of the code blocks points to the four 'if' blocks, indicating that there are four possible choices in the code.

# Task 3: Talking to Scratch

```
when clicked
clear graphic effects
ask 'what effect would you like?' and wait
if answer = color then
change color effect by 50
if answer = fisheye then
change fisheye effect by 50
if answer = whirl then
change whirl effect by 50
if answer = pixelate then
change pixelate effect by 25
```

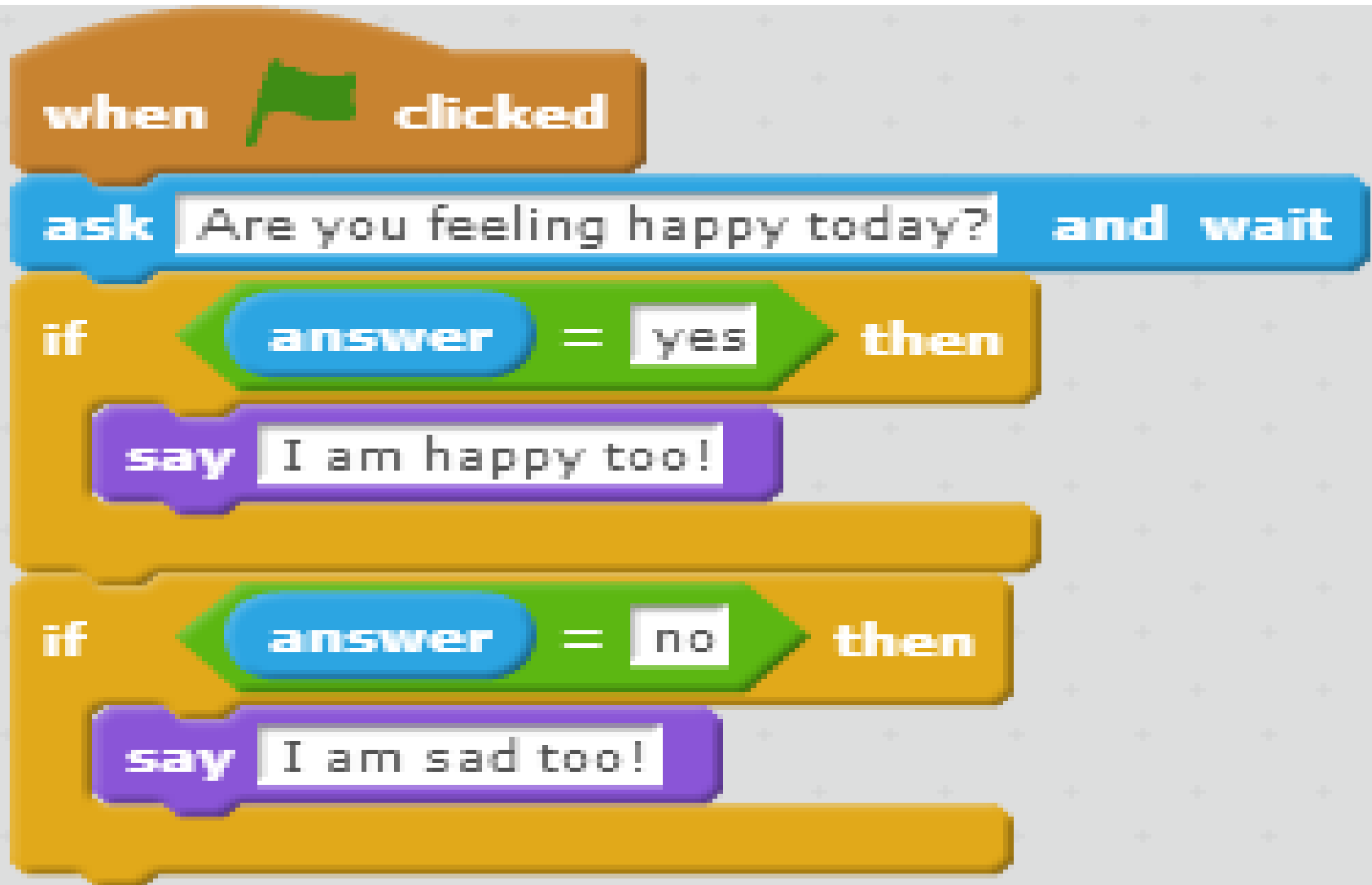
What does this block do?

When the question appears on the Scratch Stage, how many different choices can a user choose from?

What happens if you enter in the word 'blue'?

4. Answer the questions on your worksheet.

# Task 4: Jumbled Blocks



# Plenary

What is the difference between these 2 IF Statements?



There is only **1 choice** in this IF Statement



There are **2 choices** in this IF Statement e.g. TRUE or FALSE