

3 STAGE

THE LOUVRE!

★ Chapter Objective

Learn how to use variables to keep score & make puzzle quiz games.

The Game

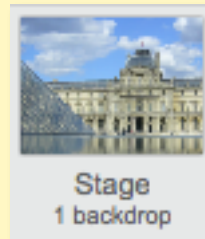
This is a two part game:
First, you'll face Rata's quiz.
Then, you'll have to put the puzzle pieces of *Mona Lisa* back together.

** Download file "Scratch Stage 3" →

Scratch Stage 3

Program Background music for the Stage

1. Click the "Stage"



2. Create the following stack:

"when  clicked"

"forever"

"play sound Xylo2 until done"




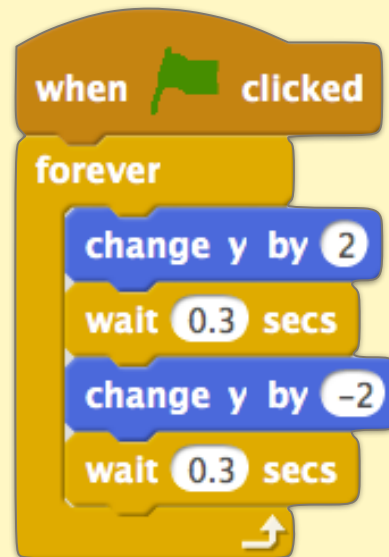
Program a floating effect for Rata

3. Click the “Rata” Sprite




4. Create the following stack:

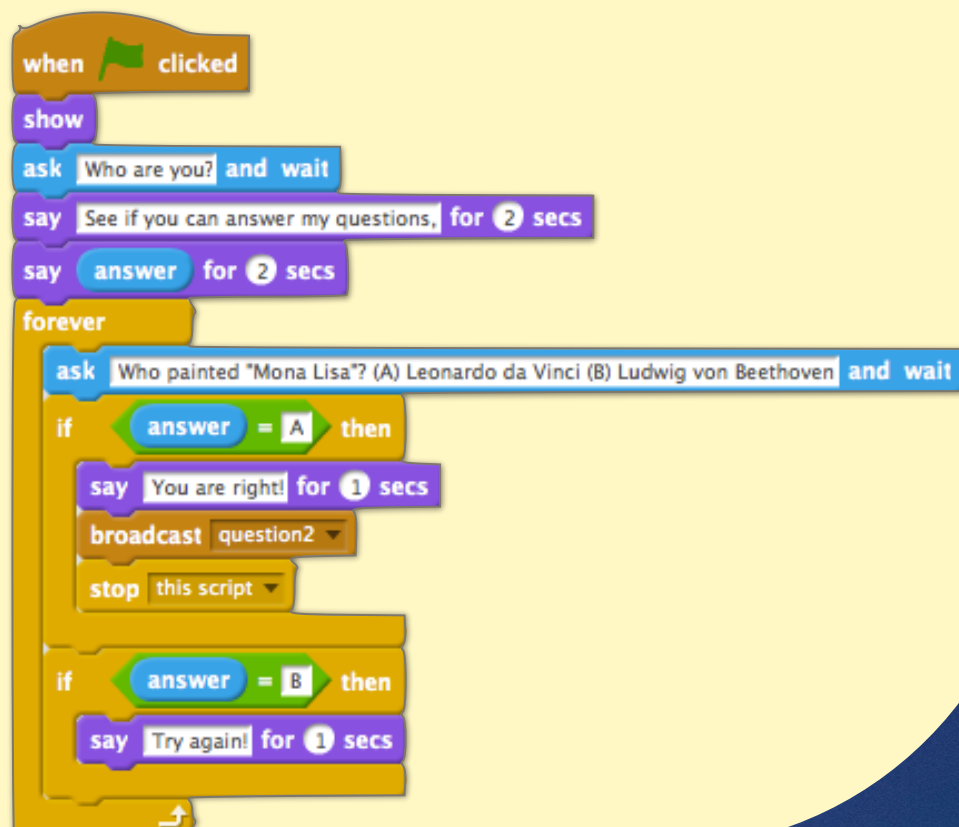
“when  clicked”
 “forever”
 “change y by 2”
 “wait .3 secs”
 “change y by -2”
 “wait .3 secs”



Program Introduction & Question 1 of Rata's Quiz

5. Create the following stack:

“when  clicked”
 “show”
 “ask Who are you? and wait”
 “say See if you can answer my questions. for 2 secs”
 “say answer for 2 secs”
 “forever”
 “ask [Insert your own question.
Make the correct Answer A] and wait”
 “if { answer = A } “then”
 “say You are right! for 1 secs”
 “broadcast question 2”
 “stop this script”
 “if { answer = B } “then”
 “say Try again! for 1 secs”



Program Question 2 of Rata's Quiz

6. Create the following stack:

“when I receive question 2”

“forever”

“ask [*Insert your own question. Make the correct Answer B*] and wait”

“if” { `answer = A` } “then”

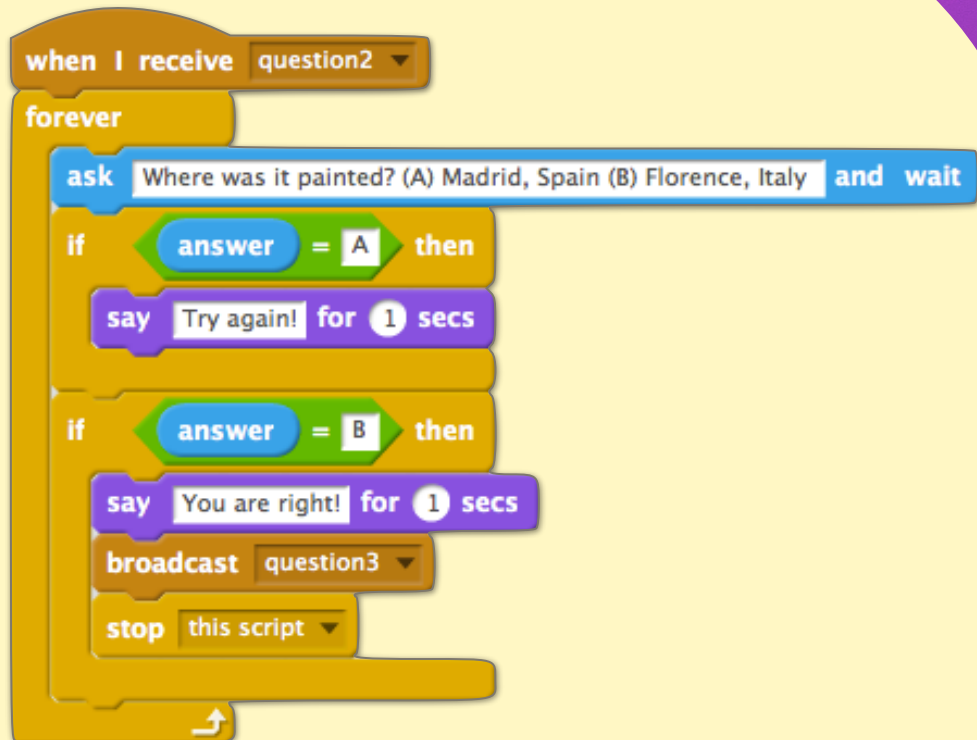
“say Try again! for 1 secs”

“if” { `answer = B` } “then”

“say You are right! for 1 secs”

“broadcast question 3”

“stop this script”



Program Question 3 of Rata's Quiz

7. Create the following stack:

“when I receive question 3”

“forever”

“ask [*Insert your own question. Make the correct Answer A*] and wait”

“if” { `answer = A` } “then”

“say You are right! for 1 secs”

“say Now try to solve this puzzle for 2 secs”

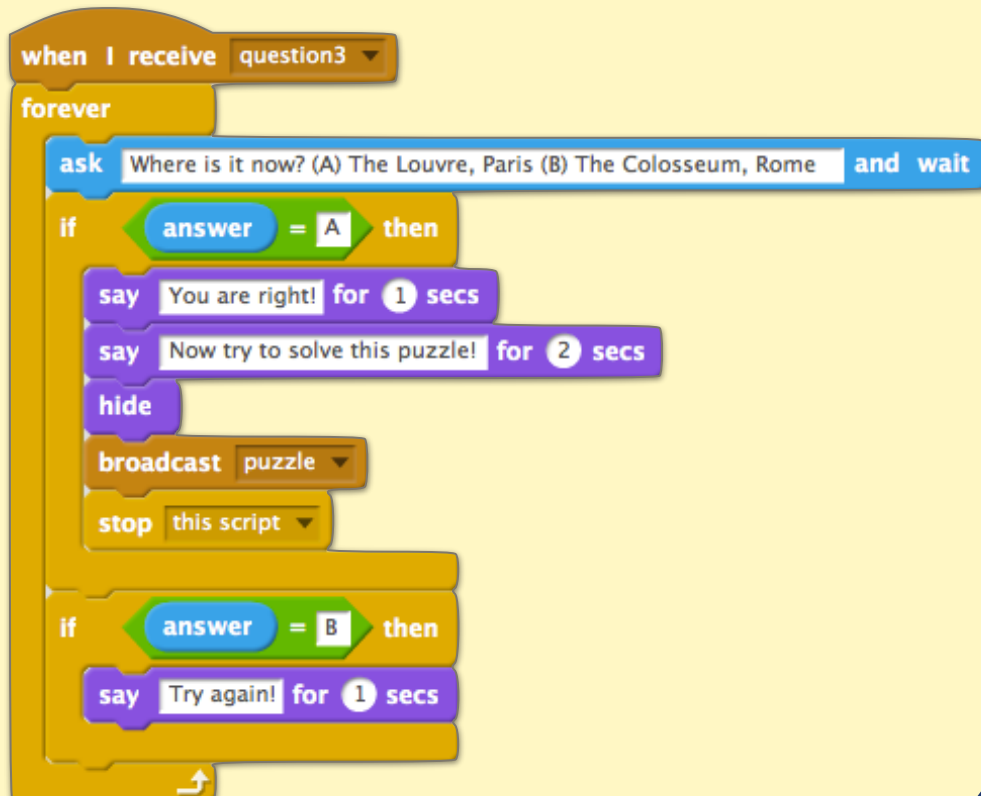
“hide”

“broadcast puzzle”

“stop this script”

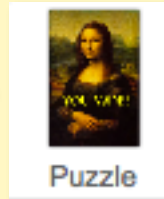
“if” { `answer = B` } “then”

“say Try again! for 1 secs”

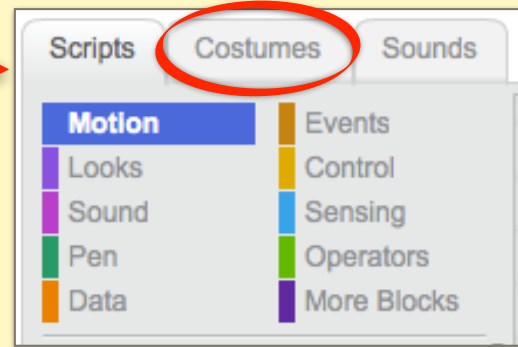


Look at the Puzzle Sprite Costumes

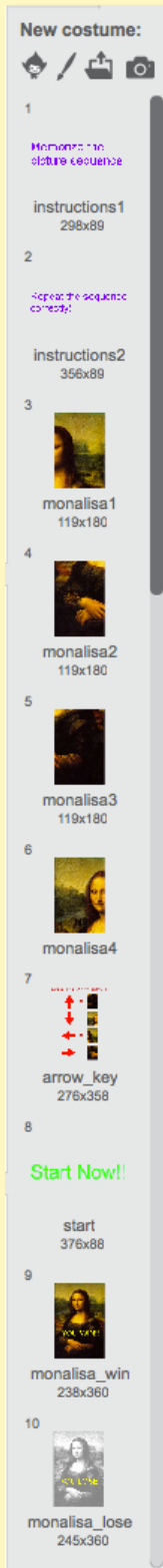
8. Click the "Puzzle" Sprite 





9. Click the "Costumes" tab 

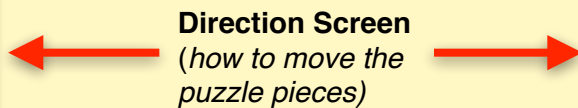


10. Look at all the 10 costumes in the Puzzle Sprite:



 **Instruction Screens**

 **4 parts of the puzzle**
(creating artwork Mona Lisa)

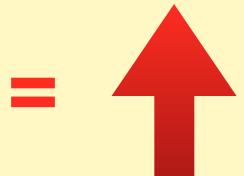
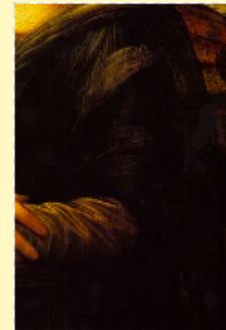
 **Direction Screen**
(how to move the puzzle pieces)

 **Start Screen**

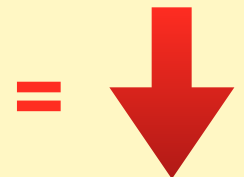
 **Win Screen**

 **Lose Screen**

P
i
e
c
e
3



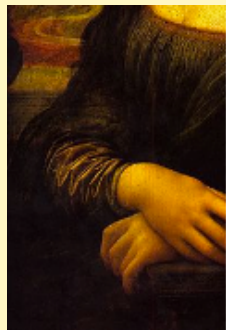
P
i
e
c
e
4



P
i
e
c
e
1



P
i
e
c
e
2



Create a "Chance" variable

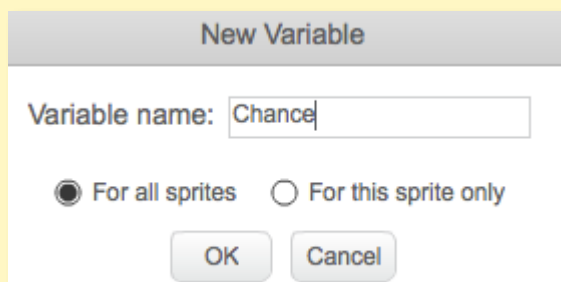
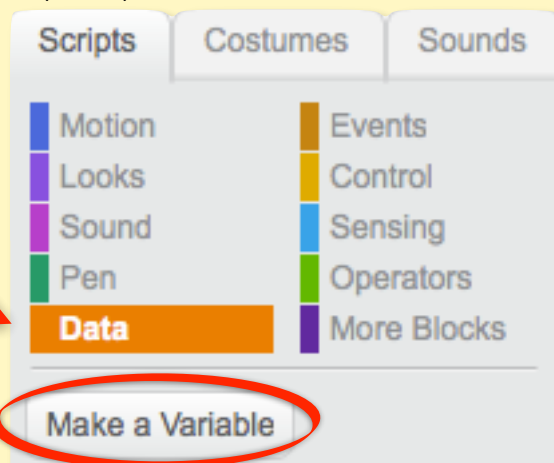
(this will give the player a couple chances/lives to solve the puzzle)

*Variables are used to keep track of points, health, lives, etc...

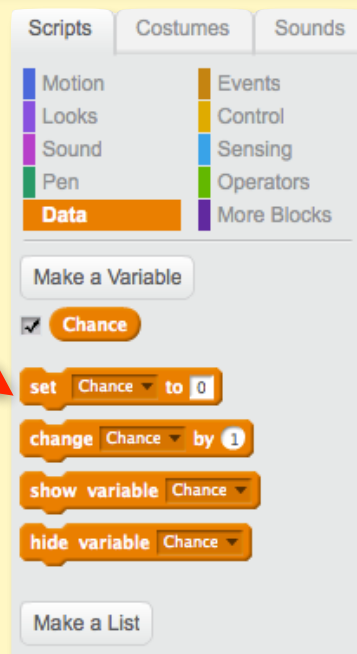
11. Click the "Data" Script

12. Click "Make a Variable"

13. Name the variable: "Chance:"



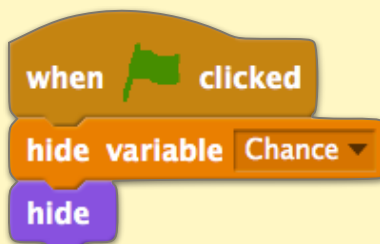
** You will now have 4 data scripts to use!!!



Hide the "Chance" variable for the Quiz part of the game

14. Create the following stack:

"when  clicked"
"hide variable Chance"
"hide"



Program the order of how the Puzzle Piece costumes will appear

15. Create the following stack:

“when I receive puzzle”
“go to x: 0 y: 0”
“show variable Chance”
“switch costume to instructions1”
“show”
“wait 2 secs”
“switch costume to monalisa1”
“wait 1 secs”
“switch costume to monalisa2”
“wait 1 secs”
“switch costume to monalisa3”
“wait 1 secs”
“switch costume to monalisa4”
“wait 1 secs”
“switch costume to instructions2”
“wait 2 secs”
“switch costume to arrow_key”
“wait 6 secs”
“switch costume to start”
“broadcast start”



Program the right answers to each of the 4 Mona Lisa Puzzle Pieces

16. Create the following 4 stacks:

**Use the Duplicate tool to save yourself time!*



1

```
when I receive start
  forever
    if key up arrow pressed? then
      switch costume to monalisa3
      say Sorry! for 1 secs
      broadcast wrong
    if key down arrow pressed? then
      switch costume to monalisa4
      say Sorry! for 1 secs
      broadcast wrong
    if key left arrow pressed? then
      switch costume to monalisa1
      say Correct! for 1 secs
      broadcast 1
      stop this script
    if key right arrow pressed? then
      switch costume to monalisa2
      say Sorry! for 1 secs
      broadcast wrong
```

correct answer

2

```
when I receive 2
  forever
    if key up arrow pressed? then
      switch costume to monalisa3
      say Correct! for 1 secs
      broadcast 3
      stop this script
    if key down arrow pressed? then
      switch costume to monalisa4
      say Sorry! for 1 secs
      broadcast wrong
    if key left arrow pressed? then
      switch costume to monalisa1
      say Sorry! for 1 secs
      broadcast wrong
    if key right arrow pressed? then
      switch costume to monalisa2
      say Sorry! for 1 secs
      broadcast wrong
```

correct answer

3

```
when I receive 1
  forever
    if key up arrow pressed? then
      switch costume to monalisa3
      say Sorry! for 1 secs
      broadcast wrong
    if key down arrow pressed? then
      switch costume to monalisa4
      say Sorry! for 1 secs
      broadcast wrong
    if key left arrow pressed? then
      switch costume to monalisa1
      say Sorry! for 1 secs
      broadcast wrong
    if key right arrow pressed? then
      switch costume to monalisa2
      say Correct! for 1 secs
      broadcast 2
      stop this script
```

correct answer

4

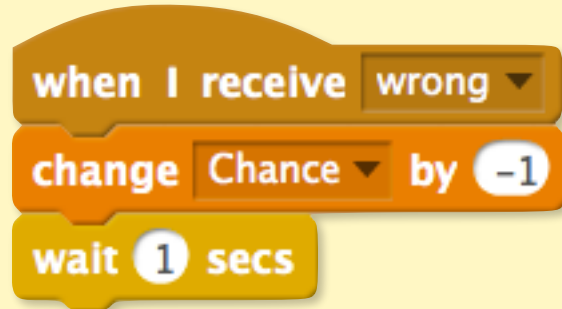
```
when I receive 3
  forever
    if key up arrow pressed? then
      switch costume to monalisa3
      say Sorry! for 1 secs
      broadcast wrong
    if key down arrow pressed? then
      switch costume to monalisa4
      say Correct! for 1 secs
      broadcast win
      stop this script
    if key left arrow pressed? then
      switch costume to monalisa1
      say Sorry! for 1 secs
      broadcast wrong
    if key right arrow pressed? then
      switch costume to monalisa2
      say Sorry! for 1 secs
      broadcast wrong
```

correct answer

Program the player's "chance" subtracts by 1, when a question is answered incorrectly.

17. Create the following stack:

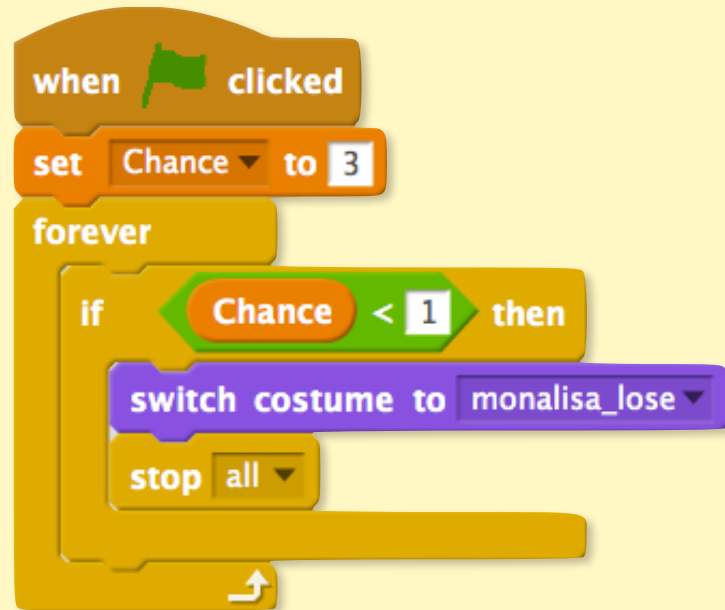
"when I receive **wrong**"
"set **Chance** by -1"
"wait 1 secs"



Program when the Losing Screen will appear

18. Create the following stack:

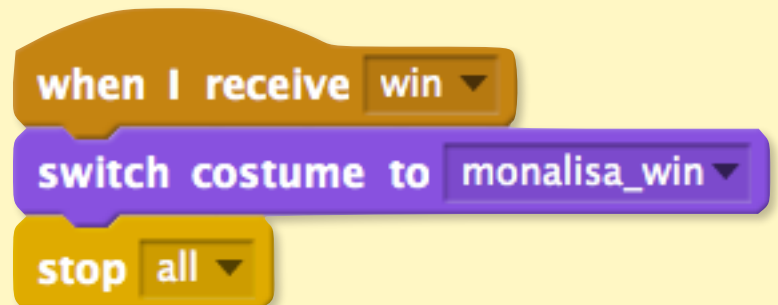
"when **flag** clicked"
"set **Chance** to 3"
"forever"
"if" { **Chance < 1** } "then"
"switch to costume monalisa_lose"
"stop **all**"



Program when the Winning Screen will appear

19. Create the following stack:

"when I receive **win**"
"switch to costume **monalisa_win**"
"stop **all**"



You just created a quiz & puzzle with variables!!!!!!

*Remember, **variables** are used to keep track of points, health, lives, etc...