

Visual Introduction to Computer Programming Pre/Post-Test

Matching

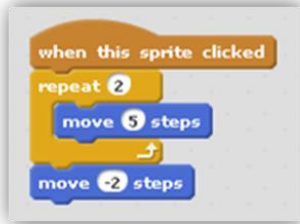
- | | |
|--|----------------|
| 1. ____ A sequence of steps that accomplish a task | A. Event |
| 2. ____ Runs the same sequence multiple times | B. Loop |
| 3. ____ A placeholder for data such as numbers | C. Conditional |
| 4. ____ Something that initiates an action | D. Bug |
| 5. ____ Changes the flow of the program based on a true or false statement | E. Function |
| 6. ____ Performs a mathematical or logical operation | F. Operator |
| 7. ____ Performs a specific task based on input and returns a result | G. Algorithm |
| | H. Interface |
| | I. Variable |

Multiple Choice

8. ____ A computer program
- | | |
|------------------------------|----------------------------|
| A. Is series of instructions | C. Is written with code |
| B. Can be short or long | D. <i>All of the above</i> |
9. ____ Which of the following is an example of an IP address?
- | | |
|----------------|----------------|
| A. 2485464 | C. 10.26.58.5 |
| B. 793-3567-24 | D. 01101110101 |
10. ____ Which of the following could NOT be stored in a variable?
- | | |
|--------------------------|----------------|
| A. Text | C. Boolean |
| B. Number with a decimal | D. Conditional |
11. ____ What is a Boolean?
- | | |
|--------------------|----------------------------|
| A. True or false | C. Routes Internet traffic |
| B. Part of the RAM | D. Any number over 255 |
12. ____ Data is sent across the Internet in little groups called ____ .
- | | |
|------------|------------|
| A. Groups | C. Bundles |
| B. Packets | D. Carts |
13. ____ Which of the following is an example of a sprite?
- | | |
|----------------------------------|-----------------------------|
| A. A graphic object on the stage | C. All blocks with an input |
| B. A "Movement" block | D. A compound condition |
14. ____ In Python, which on the following lines will output "Hello"?
- | | |
|-------------------|-------------------|
| A. print "Hello" | C. print (Hello) |
| B. output (Hello) | D. output "Hello" |
15. ____ What does DNS stand for?
- | | |
|-----------------------|----------------------------------|
| A. Dow Number Service | C. Drifting Nomenclature Service |
| B. Domain Name System | D. Data Numerical Sorting |
16. ____ Bar codes are a form of ____ that can be read by a laser.
- | | |
|---------------|-----------|
| A. Algorithms | C. Binary |
| B. Letters | D. Colors |
17. ____ To specify the location of sprites, Scratch blocks use ____ .
- | | |
|------------------------|----------------------------|
| A. A coordinate system | C. Magic |
| B. Input | D. <i>All of the above</i> |
18. ____ Functions use ____ to return an ____ .
- | | |
|--------------------------|-------------------|
| A. Conditionals, outcome | C. Input, outcome |
| B. Conditionals, output | D. Input, output |

Code Blocks

19. _____ How many steps *total* will this sprite move when clicked?



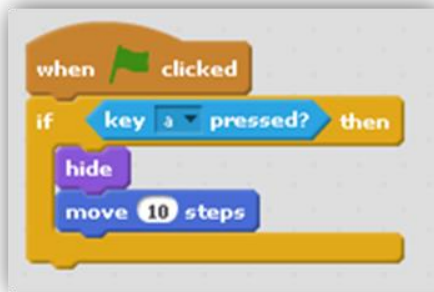
The code block starts with 'when this sprite clicked'. It then enters a 'repeat 2' loop. Inside the loop, there are two 'move' blocks: 'move 5 steps' followed by 'move 2 steps'.

- A. None
- B. 3
- C. 8
- D. 10

20. _____ Which the following blocks is an example of an *operator*?

- A. 
- B. 
- C. 
- D. 

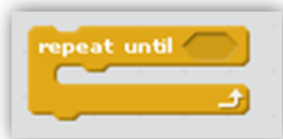
21. _____ When will this sprite be hidden?



The code block starts with 'when green flag clicked'. It then has an 'if key "a" pressed?' block. Inside the 'if' block, there are two blocks: 'hide' and 'move 10 steps'.

- A. Never
- B. When 'A' is pressed on the keyboard
- C. When the green flag is clicked
- D. When 'A' is pressed on the keyboard and the green flag is clicked

22. _____ The following block is an example of a(n) _____ .



The code block is 'repeat until' with a loop arrow icon.

- A. Operator
- B. Loop
- C. Algorithm
- D. Variable

23. _____ What is output when this block is executed?



The code block is 'say letter 3 of world'.

- A. r
- B. w
- C. d
- D. l

Free Response

Answer as best you can.

24. Why do computers use 1s and 0s to think and communicate?

25. Why is it important to write clear, concise code?

26. Why is it important to develop in code little by little (in increments)?

27. Why are manhole covers round?



Manhole cover

Post-Test Only

Feedback

What did you like most about the class?

What did you like least about the class?

Did you enjoy the class? What is the most awesome thing you learned?
