# Lesson 5.7: Assessment Exercises

## Objectives

After completing this lesson, students will:
- ❖ Have an understanding of how much they learned and understood during Unit 3

## Agenda

| | |
|---|---|
| 1. Student Activity | 30 mins |
| 2. Review and Wrap Up | 20 mins |

## Resources & Links

- ❏ None

## Preparation

- ❏ Print student activity worksheet (one per student)

## 1. Student Activity:  Assessment Exercises

Optionally do a quick review of material covered in Unit 3 or you can use the exercise solutions discussion as a means to review the material.

Distribute one worksheet per student.  This is an assessment activity for material covered in Unit 5.   Explain the activity to students.   Leave enough time at the end to go over the answers.

## 2. Review Activity Solutions

**Engage** students in an interactive discussion and review of the answers to each of the exercises.

1. A variable is ...

   c) A placeholder in the computer's memory to keep track of data

2. What is the difference between a repeat loop and a forever loop ?

   A **forever loop** repeats the script as long as the program runs.
   A **repeat loop** only repeats the script as many times as stated inside the repeat block.

3.
   c) The sprite moves to the top,  when it reaches the top of the stage, it says "I made it !!"

3b.  "**Change y by 5"** moves a sprite from left to right.

   ✅  False

   "**Change y by 5"** moves the sprite along the y axis which is up and down (vertical).

4. Which script for a monkey sprite matches this description:  …...

   I) _B__

   II)  The script for '**C'** only checks if the monkey sprite touches the Bananas ONCE.
   The description says **Every time**, which means we need the forever loop to continuously check if it touches the bananas.

HMMM ?

5.
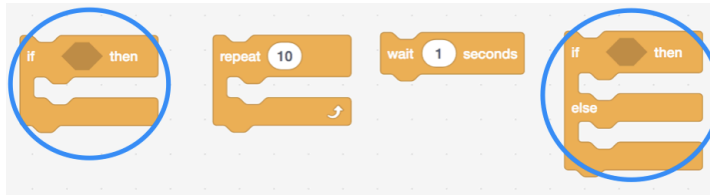


6. To keep track of a score in a game, the program needs a…  Circle the correct answer.
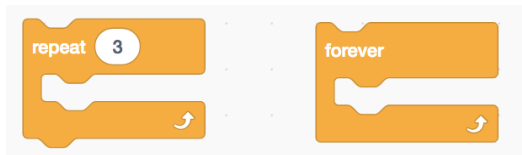
c) A variable

**Student Activity:    Assessment Exercises**

1.  A variable is ...    Circle the correct answer.

    a)  A treasure box

    b)  A memory chip that remembers data

    c)  A placeholder in the computer's memory to keep track of data

    d)  Something all games need

2.  What is the difference between a repeat loop and a forever loop ?



_____

_____

3.  A sprite is in the middle of the stage.  What does the sprite do when this script runs ?
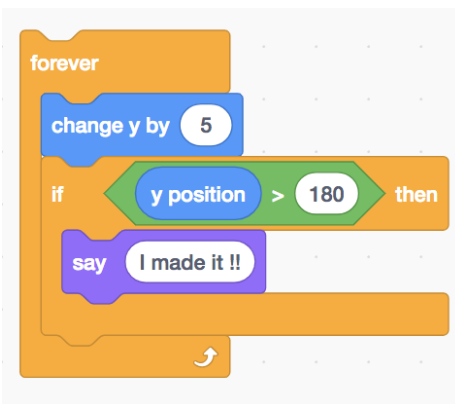


a)  The sprite moves to the right ,  when it reaches the other side of the stage, it says "I made it !!"

b)  The sprite moves to the top,  when it reaches the top of the stage, it says "I made it !!"

c)  The sprite moves 5 times and when it goes past 180, it says "I made it !!"

Answer: _____

3b. "**Change y by 5**" moves a sprite from left to right.

❏ True
❏ False

4. Which script for a monkey sprite matches this description:

**Every time the monkey touches the Bananas, the score increases by 1**

**I)** _____

A

```
forever
    if  touching color 🟡 ?  then
        change score by 1
```

B

```
forever
    if  touching Bananas ?  then
        change score by 1
```

C

```
if  touching Bananas ?  then
    change score by 1
```

D

```
repeat 10
    if  touching Bananas ?  then
        change score by 1
```

**II )** Why is 'C' not the correct answer?

_____

_____

HMMM ?

5. A *conditional statement* is when we ask if something is true or false before we do something.

   Circle all conditional statements !
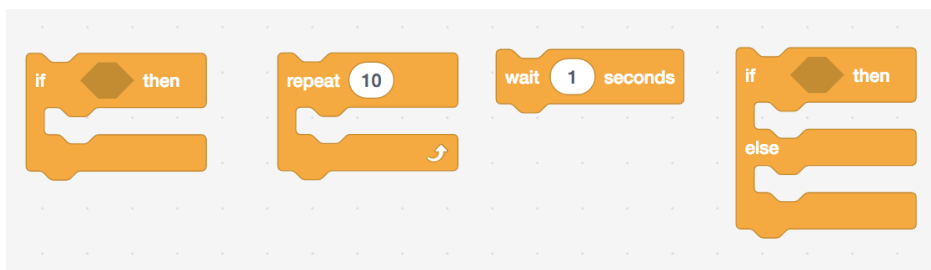


6. To keep track of a score in a game, the program needs a _____.

   Circle the correct answer.

   a) An operator
   b) Animation
   c) A variable
   d) A forever loop