

## Worksheet: Mobil Robot Programming

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Match the following definitions: (Note: Some answers may be used more than once, other answers may not be used at all.)

- |    |                                      |     |    |  |
|----|--------------------------------------|-----|----|--|
| 1  | Loop                                 | ___ | a. | Command to run multiple tasks simultaneously   |
| 2  | Jump and Land                        | ___ | b. | 1  |
| 3  | Merge                                | ___ | c. | 5  |
| 4  | Task Split                           | ___ | d. | A  |
| 5  | Default Port for all sensors         | ___ | e. | A software routine for operating a portion of the program a predetermined number of times.                               |
| 6  | Default Value for 'Wait for Dark'    | ___ | f. | Modifier to show a value   |
| 7  | Numeric Constant                     | ___ | g. | 55   |
| 8  | Default value for 'Wait for Lighter' | ___ | h. | A software routine for operating a portion of the program forever or until another portion of the program forces it out. |
| 9  | Default power level for all motors   | ___ | i. | 16   |
| 10 | Default value for 'Wait for Push'    | ___ | j. | Icon required after every fork   |
11. The default port for outputs from the RCX is:
- a. 1
  - b. A
  - c. B
  - d. There is no default port for outputs.
12. The default value for a loop is:
- a. 1
  - b. 2
  - c. 5
  - d. There is no default value for a loop.

13. The default value for a jump and land is:
  - a. 1
  - b. 2
  - c. 5
  - d. There is no default value for a jump and land.
  
14. Every string of a task split requires a:
  - a. Stop sign
  - b. Red light
  - c. Fork Merge
  - d. Stop sign and red light
  
15. The default value for a rotational sensor is:
  - a. 1 click
  - b. 2 click
  - c. 4 click
  - d. 16 click

## Solutions: Mobil Robot Programming

1. Loop E A software routine for operating a portion of the program a predetermined number of times
2. Jump and Land H A software routine for operating a portion of the program forever or until another portion of the program forces it out.
3. Merge J A merge is an icon required after every fork
4. Task Split A A command to run multiple tasks simultaneously
5. Default port for all sensors B Port 1
6. Default value for 'Wait for Dark' G The default value for both 'Wait for Dark' and 'Wait for Light' is 55
7. Numeric Constant F A modifier to show a value
8. Default value for 'Wait for Lighter' C The default value for both 'Wait for Lighter' and 'Wait for Darker' is 5.
9. Default power level for all motors C The default power level is full power
10. Default value for 'Wait for Push' B The default value for 'Wait for Push' is 1
11. D There is no default port for outputs. The output port must be defined for all outputs.
12. B The default value for a loop is 2. If it were 1, you wouldn't need a loop in the first place.

13. D There is no default value for a jump and land. A jump and land runs forever or until some other portion of the program ends it.
14. B Every string of a task split requires a red light. Stop signs are only required for motors
15. D The default value for a rotational sensor is 1 rotation or 16 clicks.