**Fibonacci Robots Worksheet Answers**

|  |  |  |
| --- | --- | --- |
| **Term Number** | **Term** | **Distance** |
| 1 | 0 | - |
| 2 | 1 | X |
| 3 | 1 | X |
| 4 | 2 | 2X |
| 5 | 3 | 3X |
| 6 | 5 | 5X |
| 7 | 8 | 8X |
| 8 | 13 | 13X |
| 9 | 21 | 21X |
| 10 | 34 | 34X |

**Table key:** X = distance between term number 1 and 2 (circumference of wheel)

1. Using the information in the table above, divide the distance corresponding to term number 5 by the distance corresponding to term number 4. What is the quotient?

**Approximately 1.5**

1. What is the first number greater than 100 in the Fibonacci sequence?

**144, term number 13**

1. How did you connect the arm to the robot? Did you use a motor to grab the marker?

**Answers will vary.**

1. Describe the steps taken to write a working program? Did you use any loops or branches?

**Answers will vary.**

1. What changes can you make to the robot so that the distance between stops is easier to measure?

**Many answers, such as: Add a long pause between stops so that it is easier to measure…**