Maths with Melissa

Fibonacci Sequence Worksheet

Problem Solving and Exercises

1.	Write down the first eight terms of the Fibonacci sequence.
2.	What is the 10th term in the Fibonacci sequence?
3.	The Fibonacci sequence starts with o and 1. Each term after that is the sum of the two previous terms. What is the value of the 7th term?
4.	Calculate the sum of the first six terms of the Fibonacci sequence.
5.	If the 4th and 5th terms are 2 and 3, what is the 6th term?
6.	The Fibonacci sequence can be found in nature. Name one example where you can see the Fibonacci sequence in nature.
7.	If a Fibonacci sequence starts with 2 and 3 instead of o and 1, what would be the 5th term?
8.	Fill in the blank: In the Fibonacci sequence, after 21 comes
9.	True or False: The Fibonacci sequence can only start with o and 1.
10.	A snail climbs a staircase where each step is the sum of the previous two steps it climbed (following the Fibonacci sequence starting with 1 and 2). How many steps will it climb on its 6th move?

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Answer Key

- 1. 0, 1, 1, 2, 3, 5, 8, 13
- 2. 34
- 3. 8
- 4. 0+1+1+2+3+5=12
- 5. 5 (since 2 + 3 = 5)
- 6. Example answer: The arrangement of leaves on a stem, the pattern of seeds in a sunflower, or the spirals of a pinecone.
- 7. 13 (Sequence: 2, 3, 5, 8, 13)
- 8. 34
- 9. False The Fibonacci sequence can start with any two numbers.
- 10. 21 (Sequence: 1, 2, 3, 5, 8, 13, 21; so the 6th move is 21)