There are many examples of Fibonacci numbers that can be found all around us! From forests to gardens to supermarkets, Fibonacci numbers are a force of nature! Take for example...

The total number of clockwise spirals on a sunflower head is 55. As well, the number of counter clockwise spirals on a sunflower head is 34. Pineapples also have eight seeds arranged in clockwise spiral order, and the number of seeds in a pineapple is 13 in a counter clockwise spiral.

If you still doubt that nature knows its mathematics, then count the number of branches on the tree shown in the diagram on the following page:

- Start counting from the bottom at the line numbered 1. How many branches are there at level 1?
- How many branches are there at level 2?
- What about level 3?
- How many branches does the tree have at level 4?
- Continue counting branches until level 9. Record your findings and finish filling in the table.
- How many branches is the tree going to have at level 11? How did you find that?

<table>
<thead>
<tr>
<th>Level #</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Branches</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fibonacci’s Math

Activity 3 - Fibonacci Numbers in Nature
- continued

Can you believe THIS is math?