We already knew that honeybees were amazing mathematicians because of the hexagonal honeycomb, but who could have guessed their family tree would be a Fibonacci sequence!

Complete your own honeybee family tree below and use it to answer the questions.
a) How many grandparents does a male honeybee have?
b) How many great-grandparents does a female honeybee have?
c) Complete the table below showing the number of bees in each generation

|  | Child | Parent(s) | Grandparents | Great <br> grandparents | Great Great <br> Grandparents |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Female | 1 |  |  |  |  |
| Male | 1 |  |  |  |  |

d) What do you notice about the number of male honeybees in each generation? How does this compare to the number of female honeybees in each generation?
e) Could you predict the number of great great great grand parents a Female honeybee has?

## Challenge

Is there a link between the two numbers? Does this change over time?
*Hint: make a fraction and write as a decimal*

