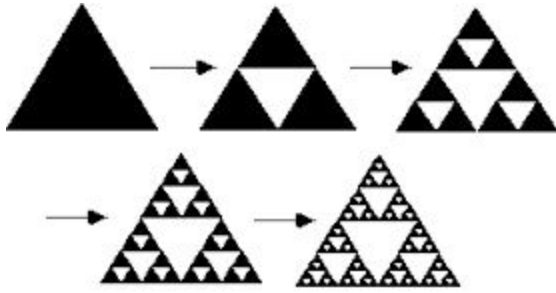


1. Research **Sierpinski's Triangle**. Write a brief description of this fractal.
2. Use the first 5 steps of Sierpinski's fractal shown below to complete the table:



Stage	0	1	2	3	4	5
Number of Shaded Triangles	1					
Fraction of Big Triangle Shaded	1/1					

3. Describe how the number of shaded triangles are growing in the pattern. Is this growth linear? Explain how you know.
4. Describe how the fraction of the triangle that is shaded is changing in the pattern. Is the fraction of the triangle that is shaded increasing or decreasing? Is this change linear? Explain how you know.
5. If you extended Sierpinski's Triangle to stage 10, how many shaded triangles would the triangle have? What fraction of the triangle would be shaded? Show your thinking.

