

# THE TRANSFORMER



INNOVATE



RESEARCH



SUPPORT



ENJOY



ACHIEVE



PARTICIPATE

A huge thank you to 750 (... and counting!) teachers, leaders and teaching assistants from 440 schools across Gloucestershire and Worcestershire that have signed up to get involved with our CPD offer this year. Despite it being such a challenging term, it's wonderful to see so many colleagues getting involved with the GLOW Maths Hub.

Thank you also for everything you have done to support children and young people enjoy and achieve in mathematics over the last 12 months ... and as it is that time of year to #LetItGLOWLetItGLOWLetItGLOW, why not have a bit of festive fun with our Tree-mendous ChrisMaths Challenge

We wish you, your school community and family a restful and enjoyable Christmas break and look forward to working with you in 2022

Best wishes  
The GLOW Maths Team

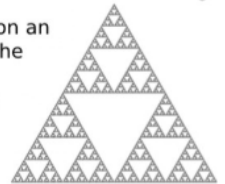
Using only tetrahedra, make the tallest ChrisMaths Tree possible ... why not ask each pupil in the school to make one tetrahedron and stick them all together to make the tree?

think-maths.co.uk

THINK MATHS

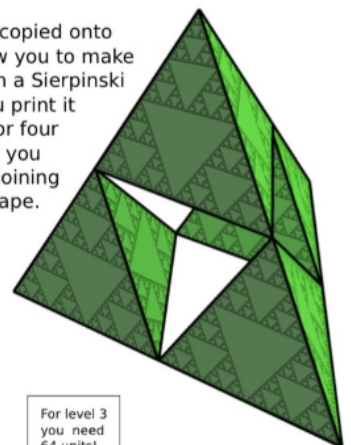
## Sierpinski Tetrahedron

A Sierpinski Triangle is a fractal based on an equilateral triangle, made by dividing the triangle into four smaller triangles, removing the central triangle and then repeating for each of the three remaining triangles. If you repeat this process forever, you get a fractal.

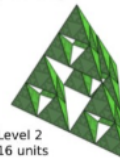


You can make a 3D version of the Sierpinski triangle - it's a tetrahedron (a shape with four triangular faces) made up of four smaller tetrahedra, with an empty space in the middle.

The attached sheet can be copied onto A3 or A4 card, and will allow you to make two tetrahedra, printed with a Sierpinski triangle on each face. If you print it twice, you'll have enough for four tetrahedra, which will allow you to make one larger one by joining them at the corners using tape. To make the next level up, make four of these larger tetrahedra and join them at the corners in the same way.



Level 1  
4 units



Level 2  
16 units

For level 3  
you need  
64 units!

What shape is the space left in the centre of your Sierpinski tetrahedron?  
How many units would you need to make a tetrahedron 10m high?

Please share your ChrisMaths Tree photos with @GLOWMaths on Twitter using #ChrisMathsTree



#LetItGLOW  
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