

40 Weeks of Math Challenges

Week 38



These visual math challenges have been created to intrigue and inspire your children. They are designed to be hands on, open-ended inquiries, to challenge them to think deeply about the world around them.

Each week a new set will be released with four levels.

- Preschool
- Years 1/2 (approx. age 6-8)
- Year 3/4 (approx ages 8-10)
- Year 5/6 (approx. ages 10-12)

I hope you enjoy exploring the ideas with your children! The challenges don't require any special resources, however your children will need a 'Math Journal' to record their discoveries. Any notebook will work, but if you can, try to encourage them to use a Grid book.

You are welcome to freely print these cards for your family but please respect our creative copyright and link back to the original file on our web page to share with others. Thanks, Jo

Find me on Instagram @jo_mathinnature and [Nature Study Australia](#)

Challenge 38

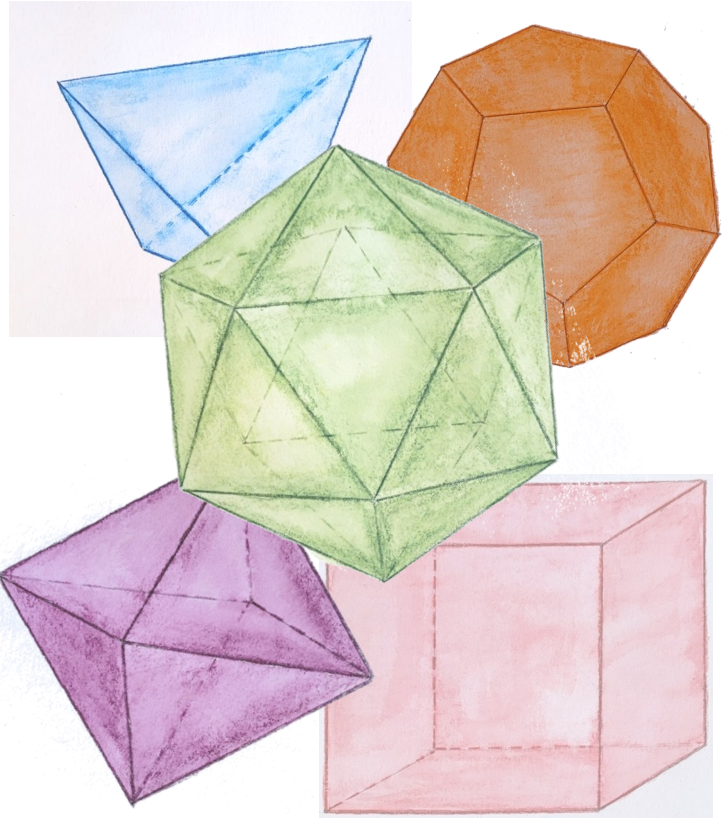
Platonic Solids

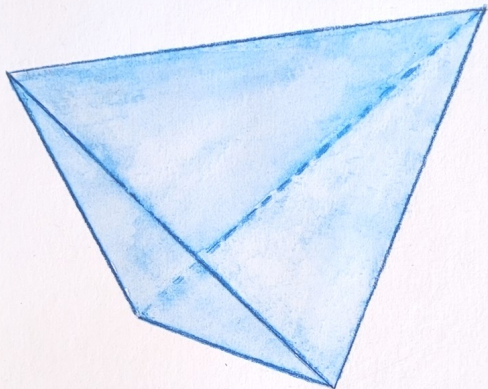
Definition:

Are 3D shapes where each side is the same regular polygon shape.

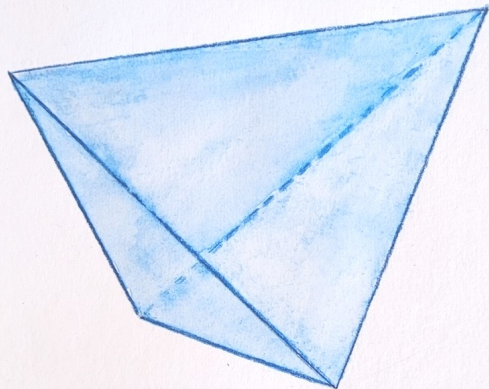
In nature we find them in viruses, crystal formation and in a tiny organism known as Radiolaria.

1. Learn the 5 platonic shapes and their properties this week.
2. Have fun drawing them.

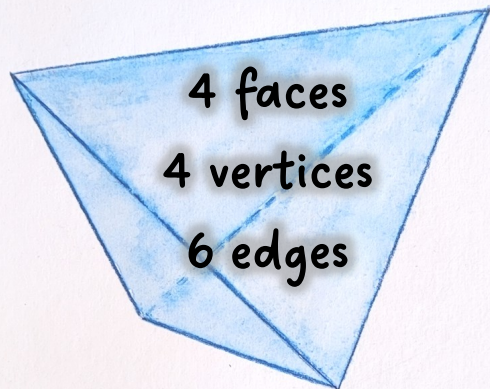




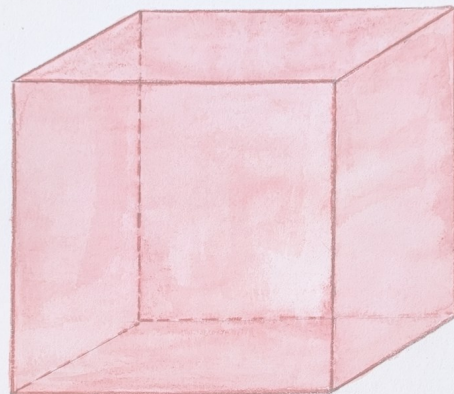
tetrahedron



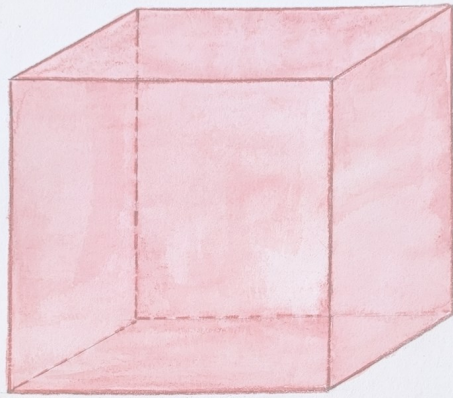
tetrahedron



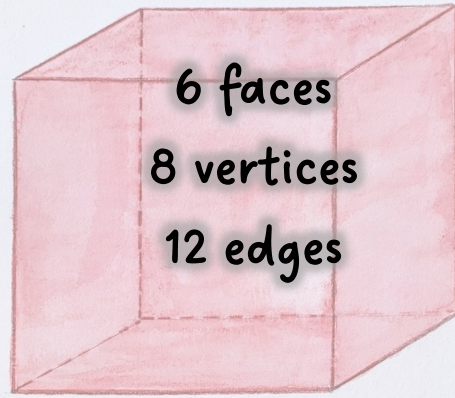
tetrahedron



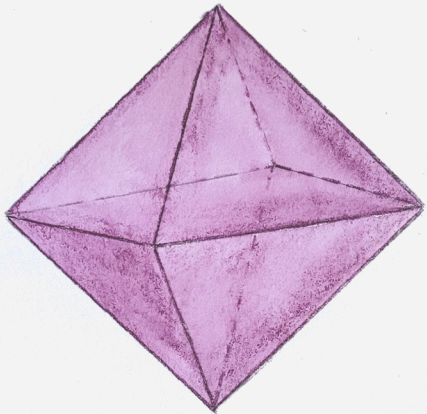
cube



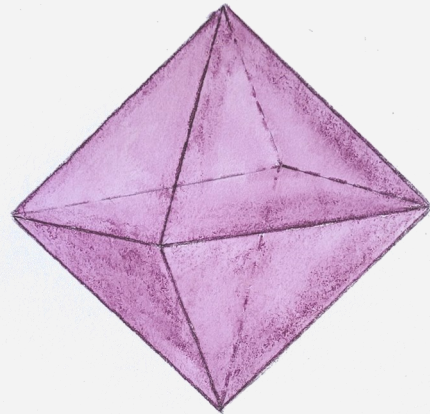
cube



cube



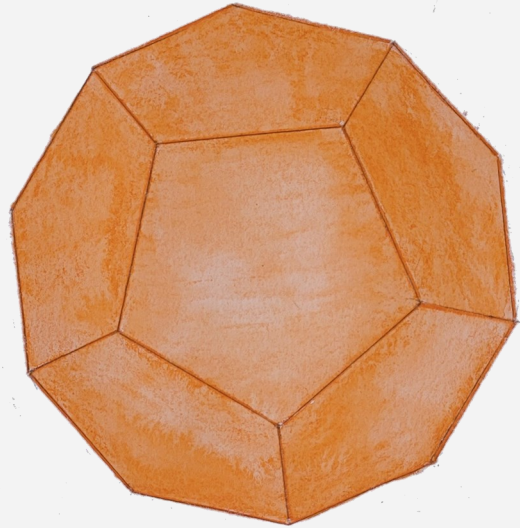
octahedron



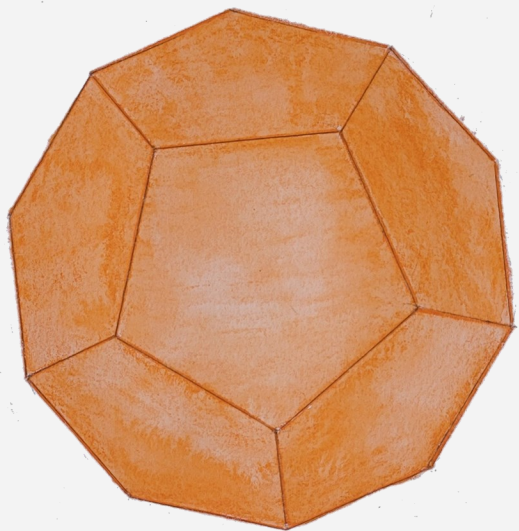
octahedron



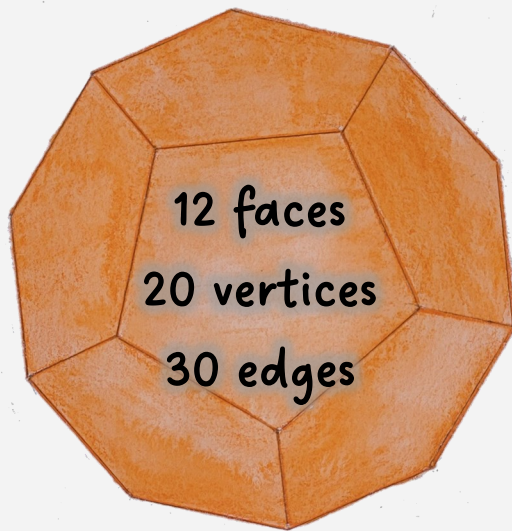
octahedron



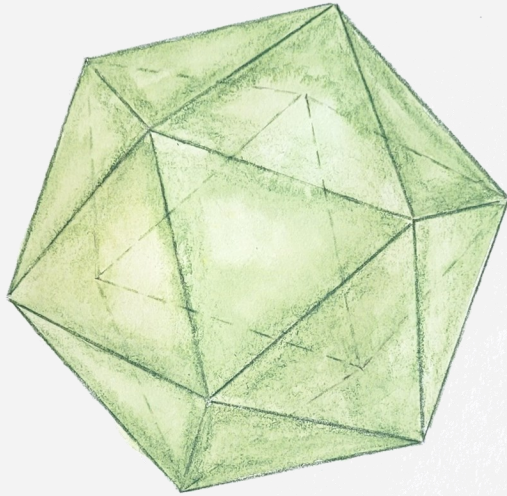
dodecahedron



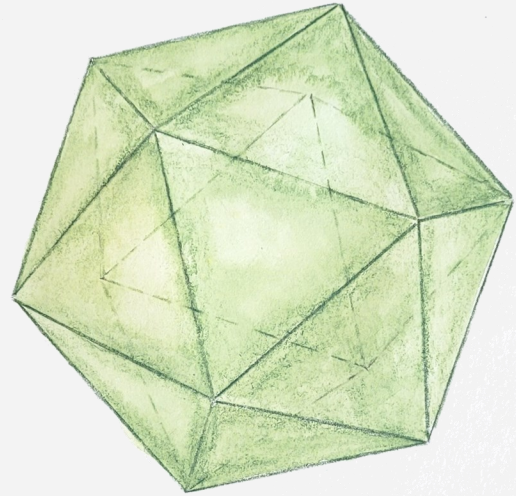
dodecahedron



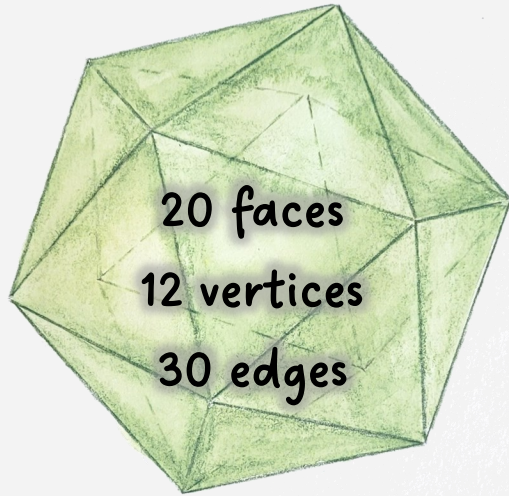
dodecahedron



Icosahedron



Icosahedron



Icosahedron

5 Platonic Solids

Name	Shape	Faces	Vertices	Edges
Tetrahedron		4	4	6
Cube		6	8	12
Octahedron		8	6	12
Dodecahedron		12	20	30
Icosahedron		20	12	30