

5 PLATONIC SOLIDS

— Drawing to Learn Workbook Series —

BOOK One



3 DIMENSIONAL GEOMETRY WORKBOOK

Explore * Colour * Cut * Fold * Learn

Discover Shapes. Build Imagination. Create in 3D!

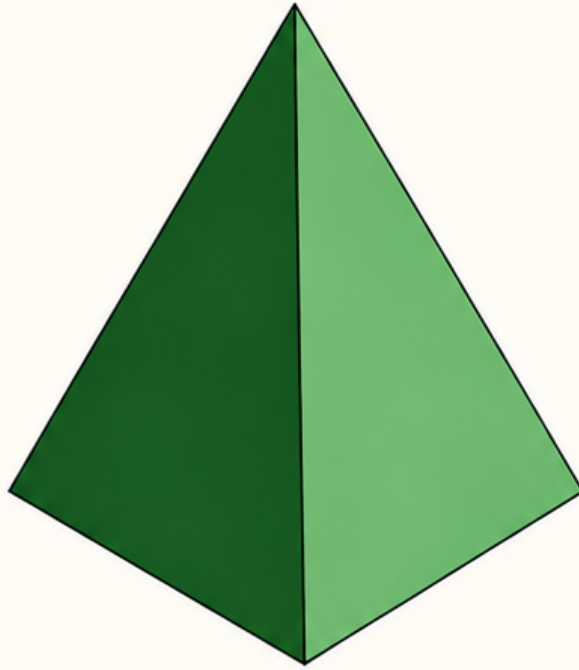
Children's Joy

childrensjoy.io

TETRAHEDRON

Activity: Colour, cut, fold up.

I am the structure of molecules -
without me you could not watch TV or listen to the radio.



Key Facts

Faces



4

(All triangular)

Edges



6

(Line segments)

Vertices



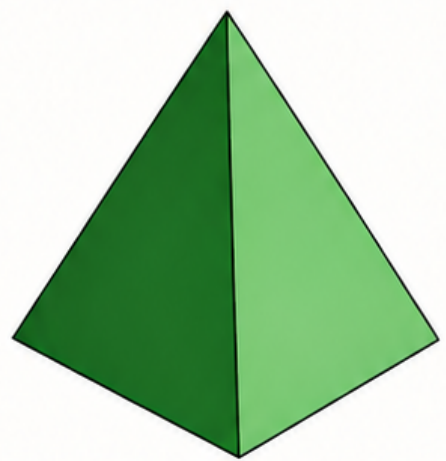
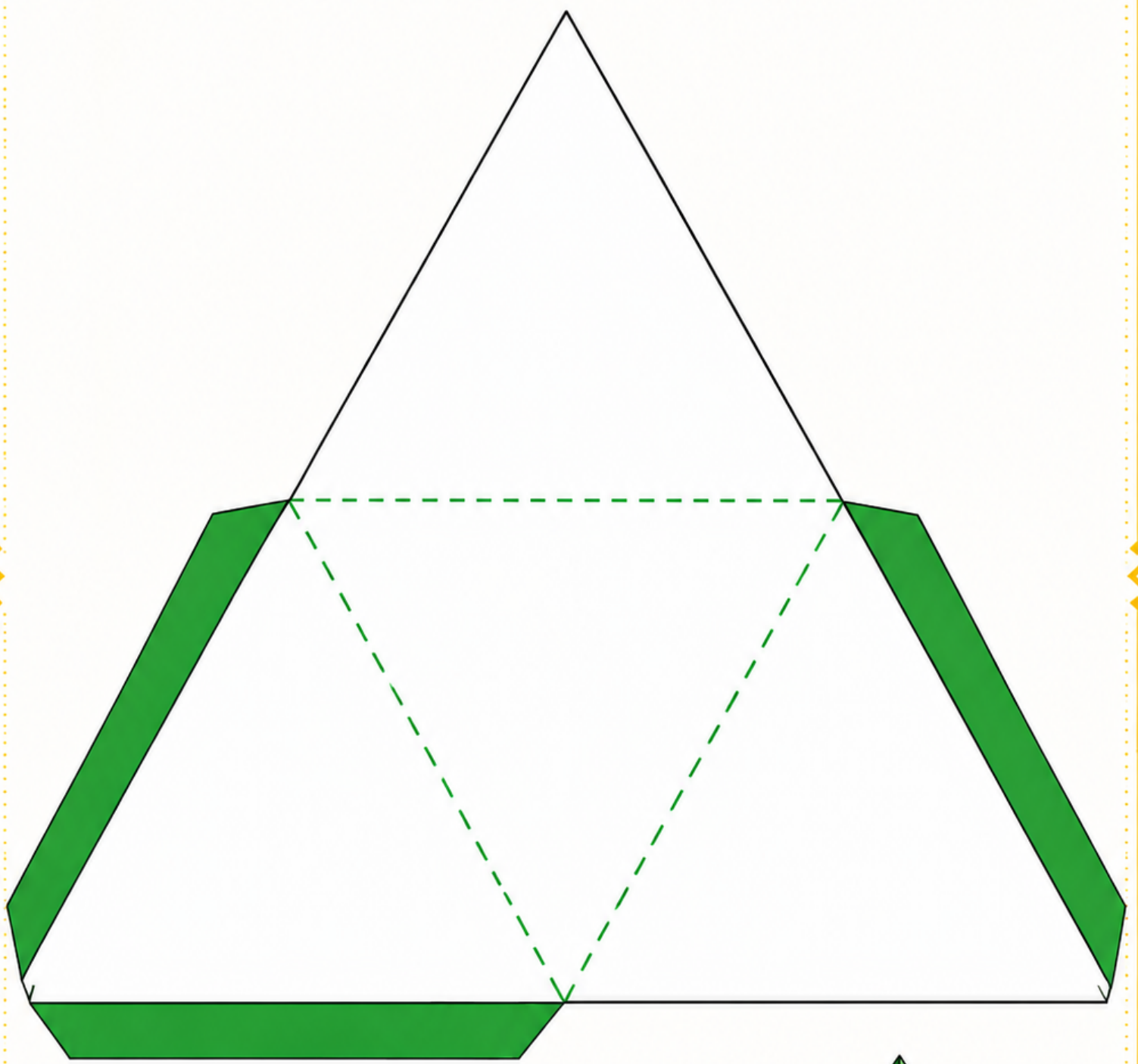
4

(Corners)

Instructions: How to Fold

1. Colour the shape neatly.
2. Cut along the solid black lines.
3. Fold along the green dashed lines.
4. Apply glue on the green tabs.
5. Fold up and stick the tabs to form your tetrahedron.

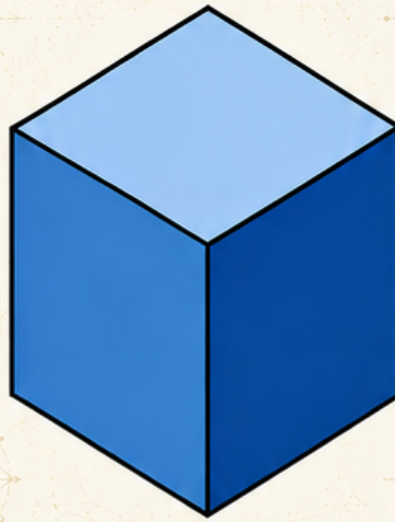
TETRAHEDRON



CUBE

Activity: Colour, cut, fold up.

I am one of the strongest and most useful shapes in nature and engineering, helping to build everything from crystal structures to buildings and storage systems.



Key Facts

Faces



6

(Squares)

Edges



12

(Line segments)

Vertices



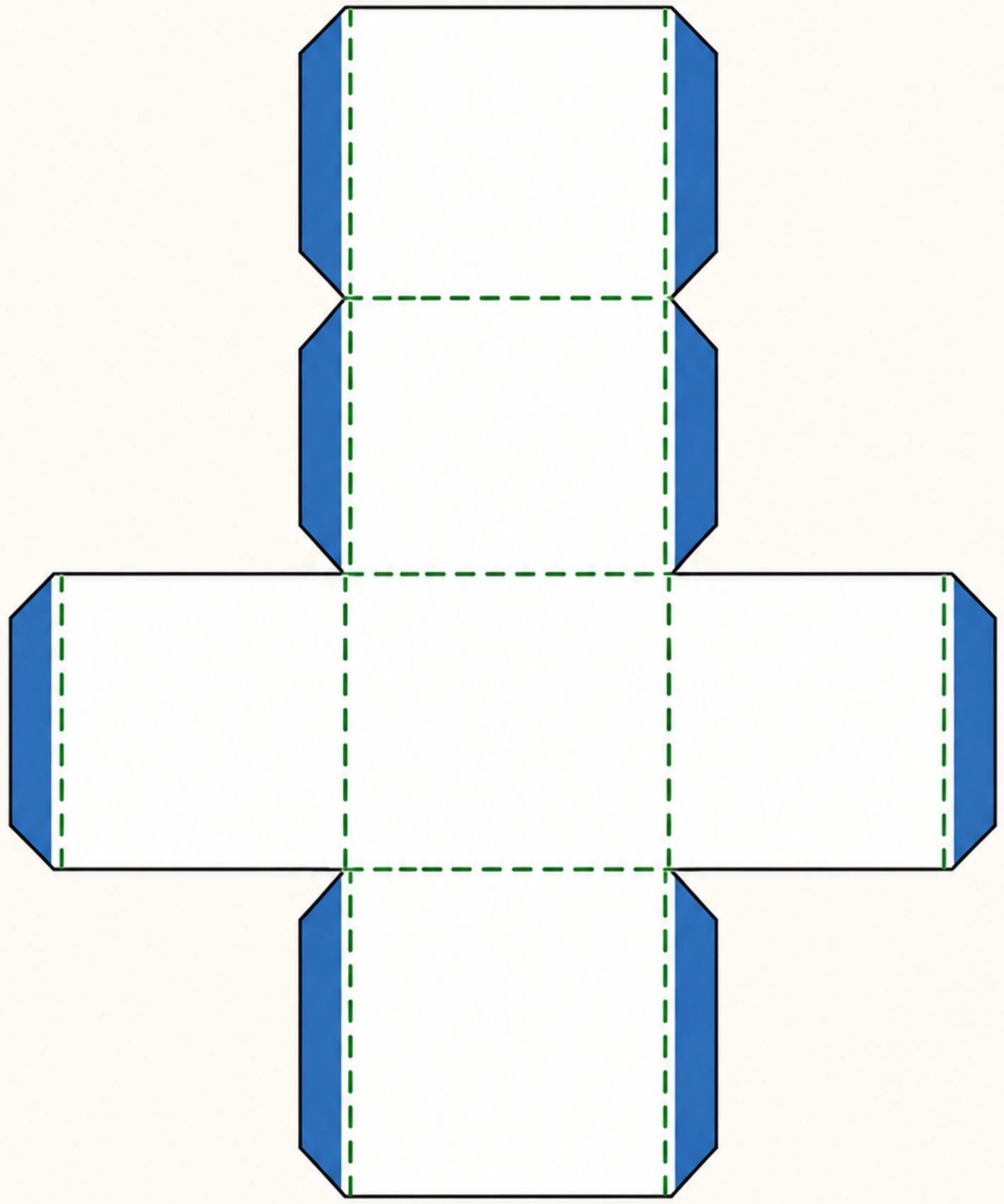
8

(Corners)

Instructions: How to Fold

1. Colour the shape neatly.
2. Cut along the solid black lines.
3. Fold along the green dashed lines.
4. Apply glue on the blue tabs.
5. Fold up and stick the tabs to form your Cube.

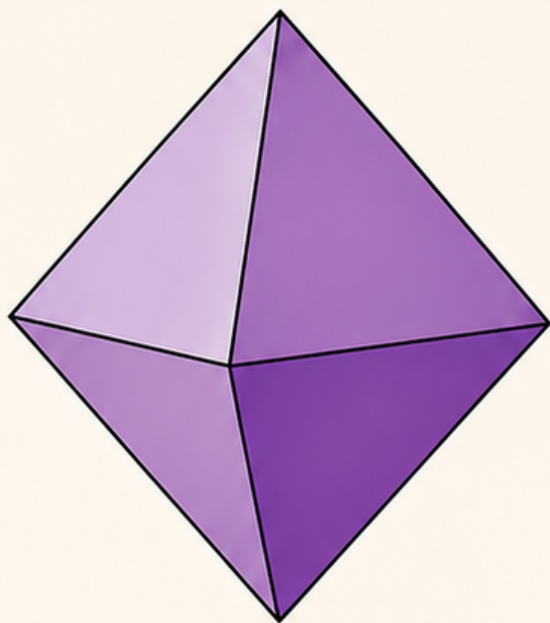
CUBE



OCTAHEDRON

Activity: Colour, cut, fold up.

My shape is the very form of a Diamond – symbol of strength,
clarity and eternal love.
I protect and remove negative forces.



Key Facts

Faces



8

(Triangles)

Edges



12

(Line segments)

Vertices



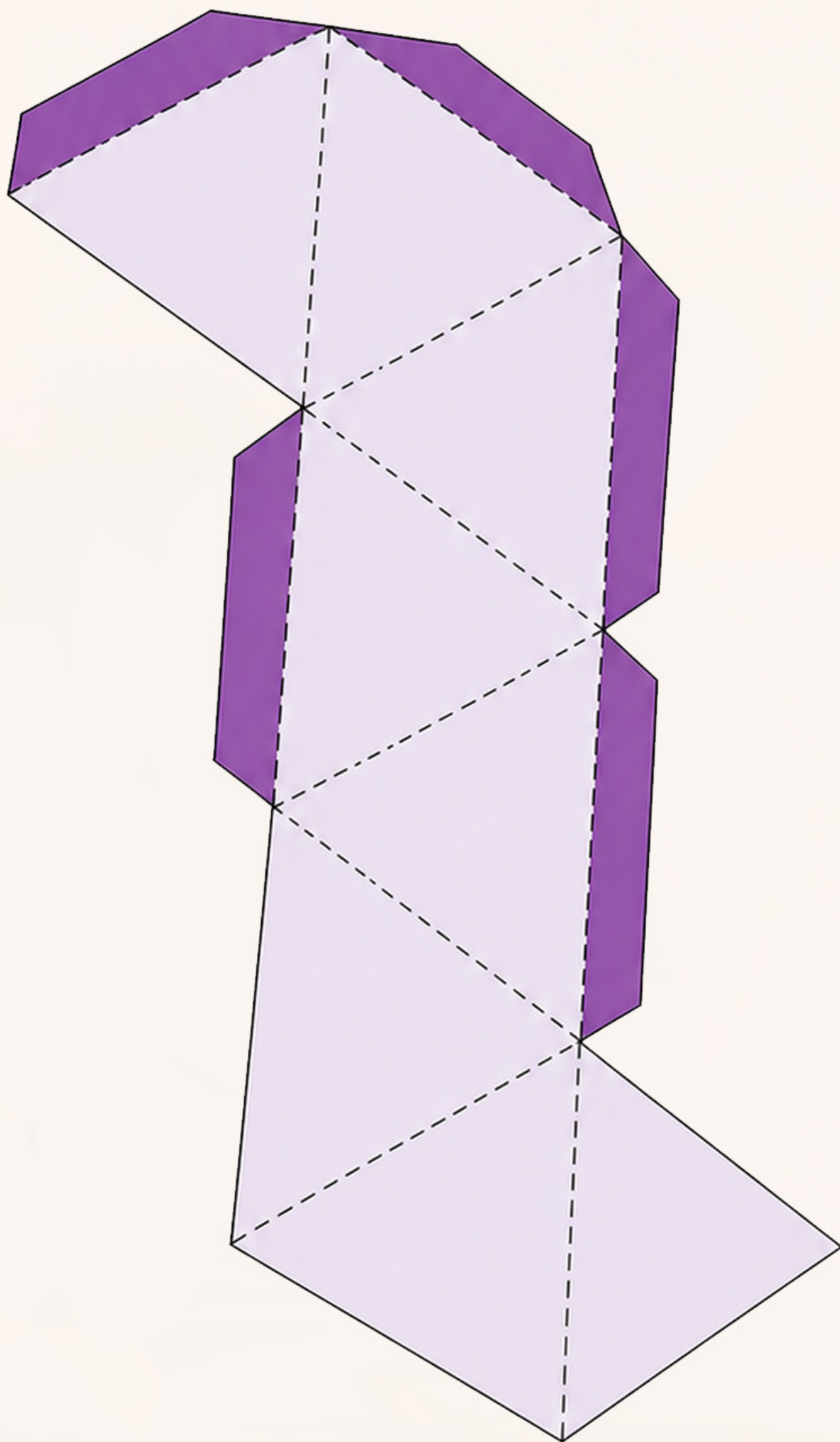
6

(Corners)

Instructions: How to Fold

1. Colour the shape.
2. Cut along the solid black lines.
3. Fold along the dashed lines.
4. Apply glue on the purple tabs.
5. Fold up and stick the tabs to form your Octahedron.

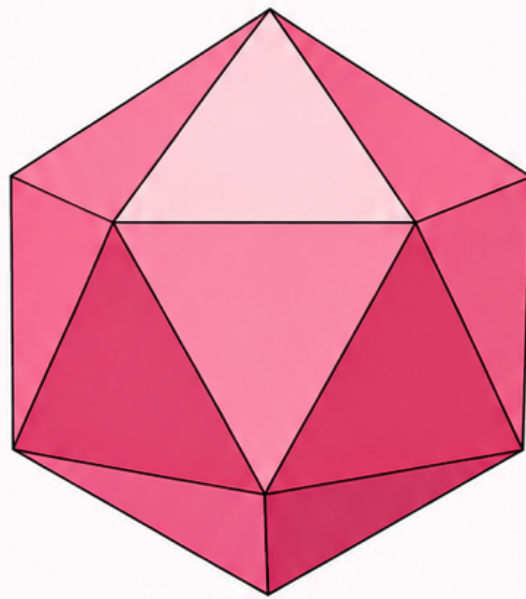
OCTAHEDRON



ICOSAHEDRON

✂ Activity: Colour, cut, fold up. ✂

I am shape of oxygen and carbon.
I connect elements and energies
bringing harmony to all.



✂ Key Facts ✂

Faces



20

(Triangles)

Edges



30

(Line segments)

Vertices



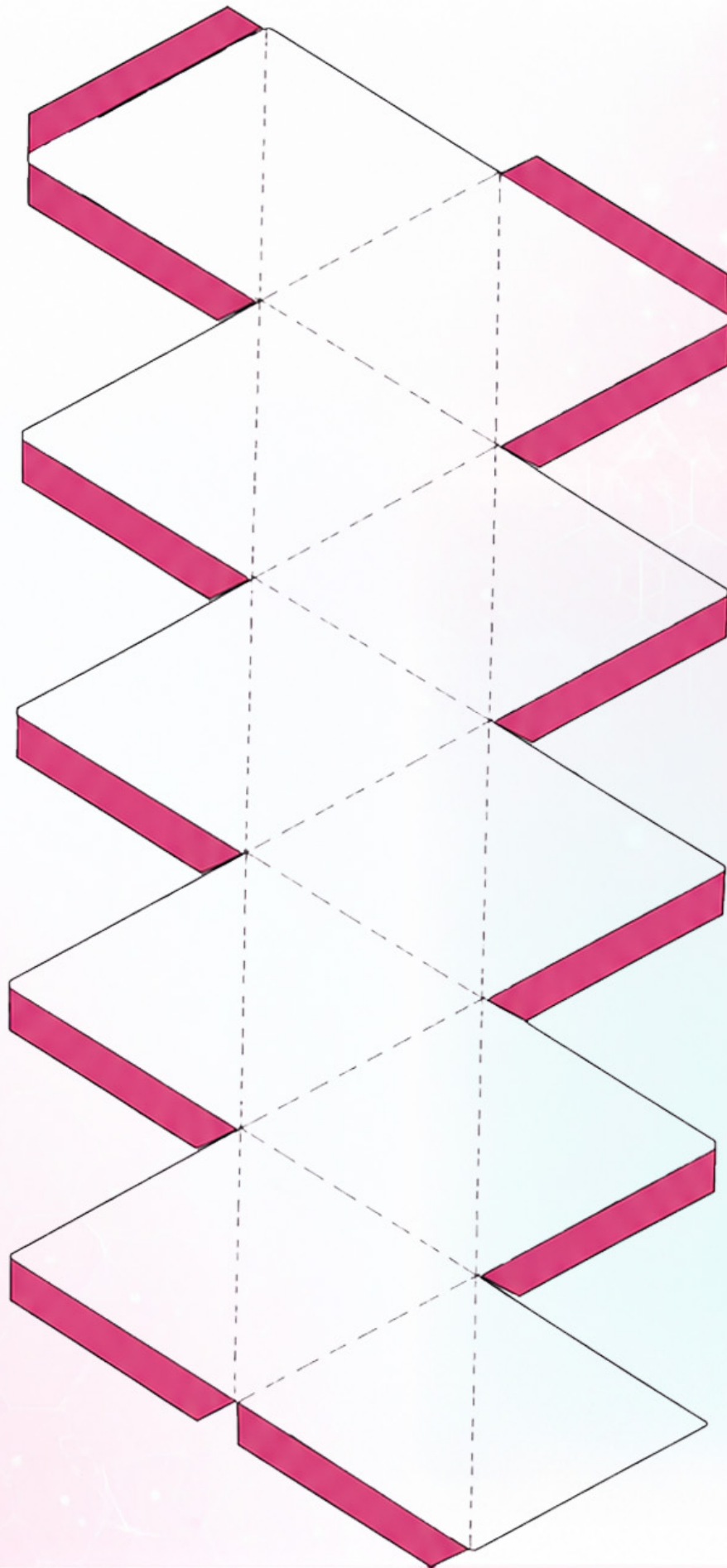
12

(Corners)

✂ Instructions: How to Fold ✂

1. Colour the shape neatly.
2. Cut along the solid black lines.
3. Fold along the dashed lines.
4. Apply glue on the dark pink tabs.
5. Fold up and stick the tabs to form your Icosahedron.

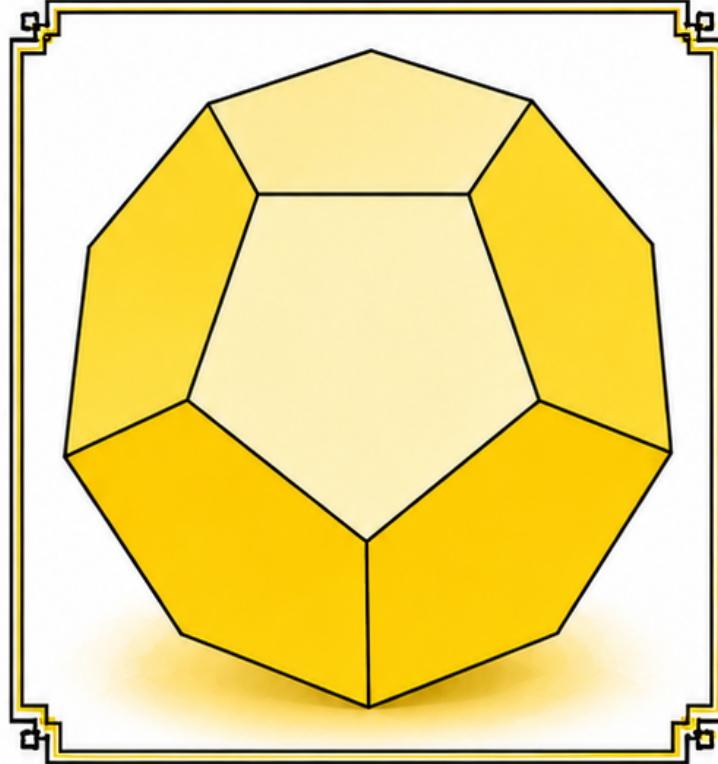
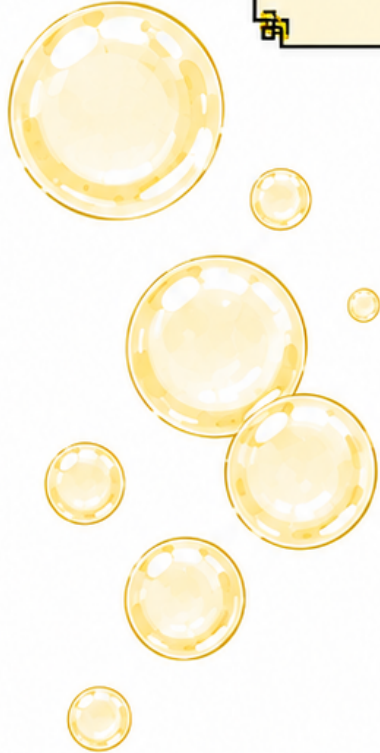
ICOSAHEDRON



DODECAHEDRON

Activity: Colour, cut, fold up.

In nature I appear in soap bubbles and crystals.



Key Facts

Faces



12

(Pentagons)

Edges



30

(Line segments)

Vertices



20

(Corners)

Instructions: How to Fold

1. Colour the shape.
2. Cut along the solid black lines.
3. Fold along the black tabs.
4. Apply glue on the black tabs.
5. Fold up and stick the tabs to form your Dodecahedron.



DODECAHEDRON

