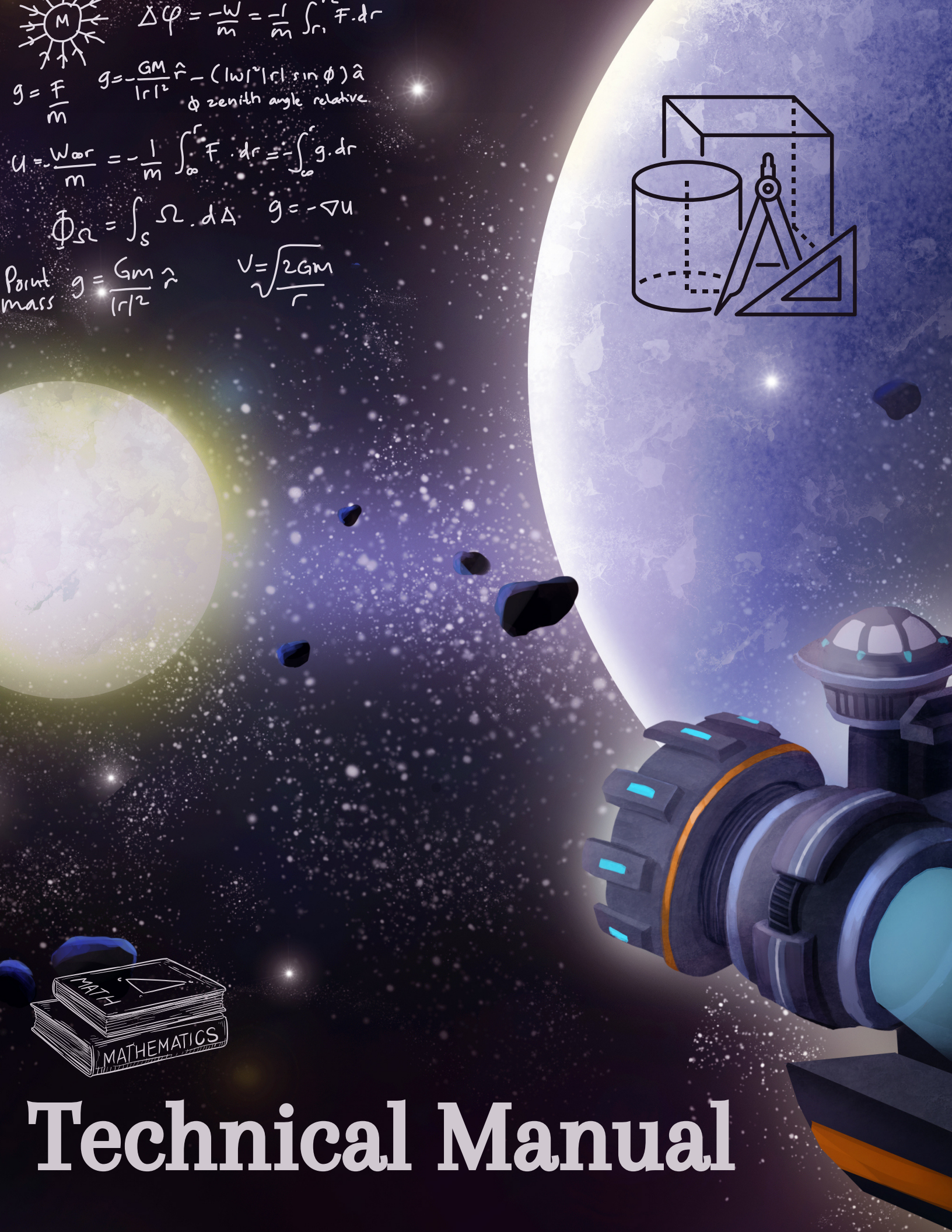
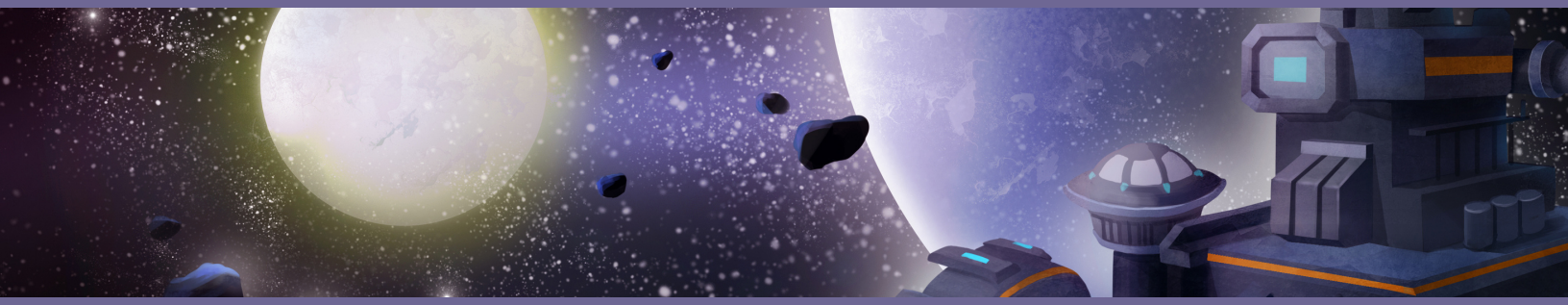


Technical Manual



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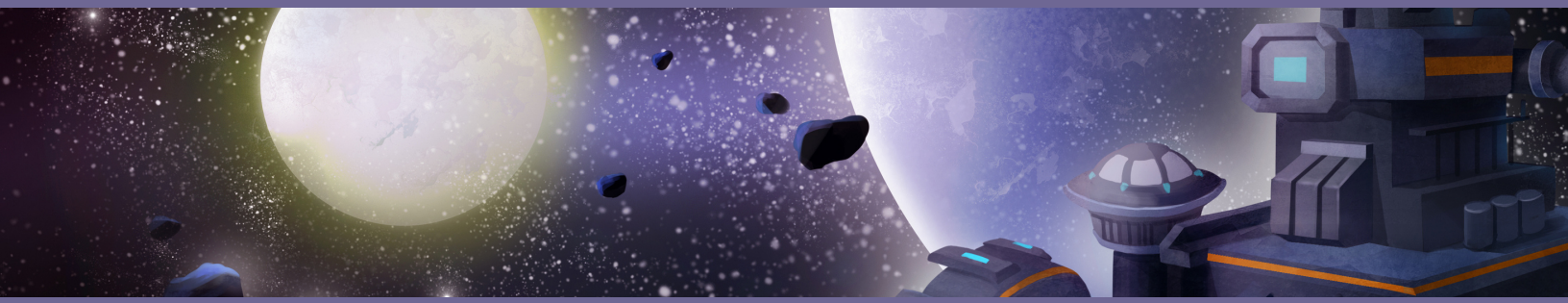
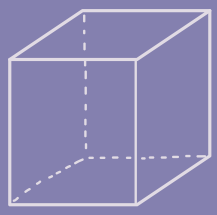


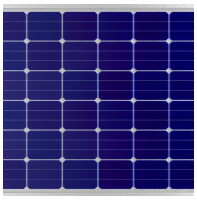
01

Solar Panel Cubes

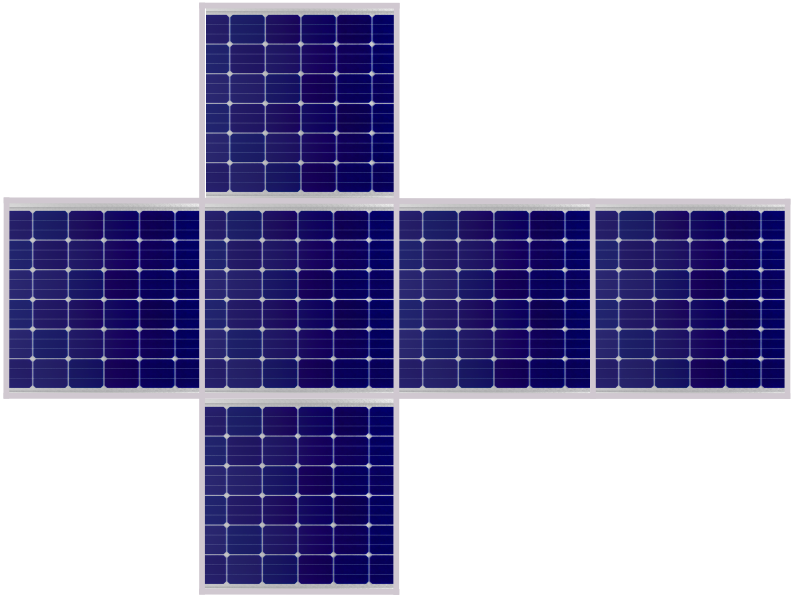
Instructions for assembling and deploying solar panel cubes for collecting energy from stars. Includes Cubes A, B, and C.

Cube A





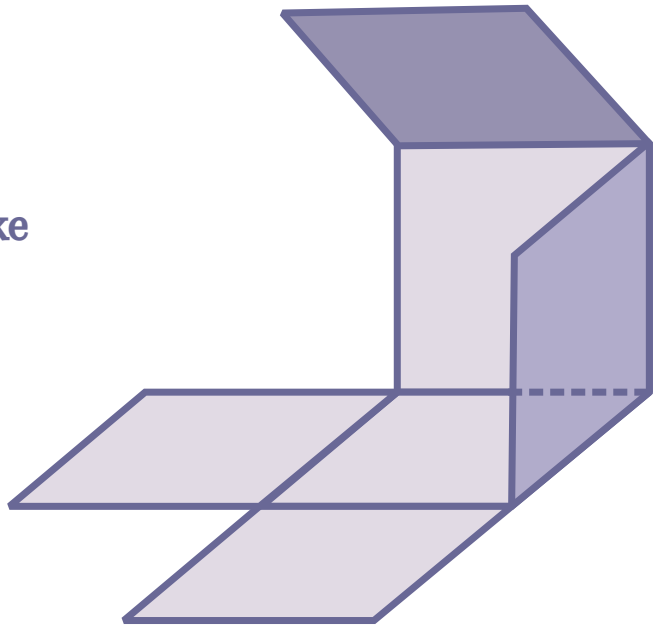
This is What One Solar Panel Looks Like



This shape that you can fold into a 3-D shape is called a "Net"

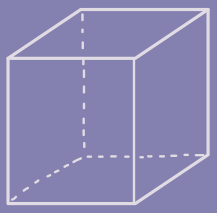
How to Assemble the Apparatus:

1. Cut the 't' shape out
2. Fold along each thick gray lines to make 90 degree angles
3. Tape the edges of the cube together



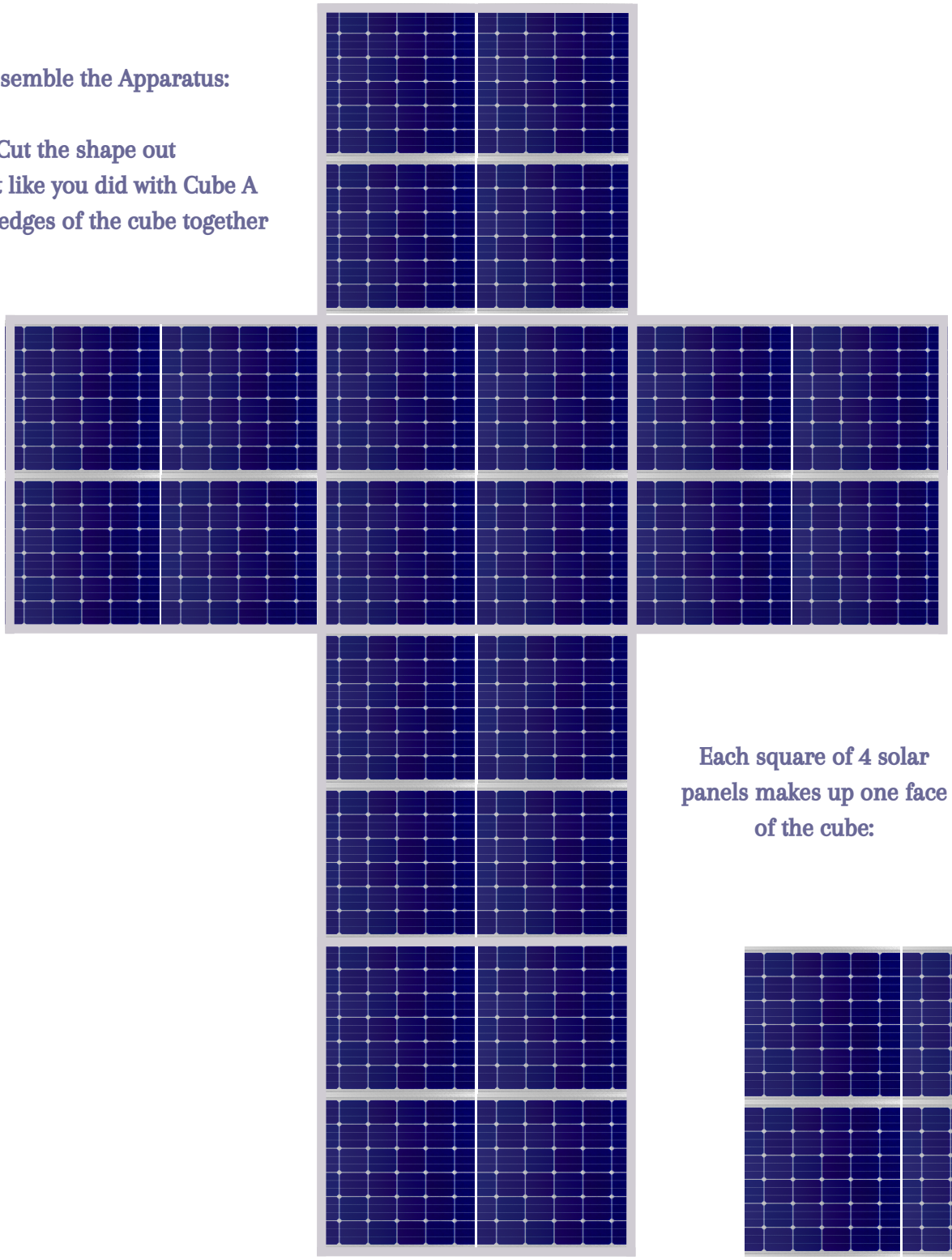
Example of a Partially Folded Cube

Cube B

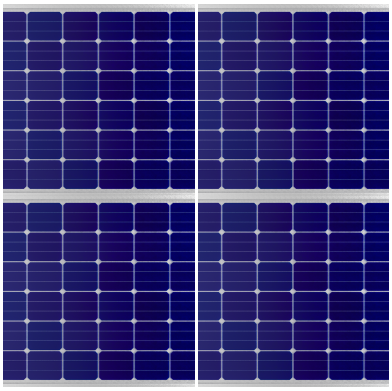


How to Assemble the Apparatus:

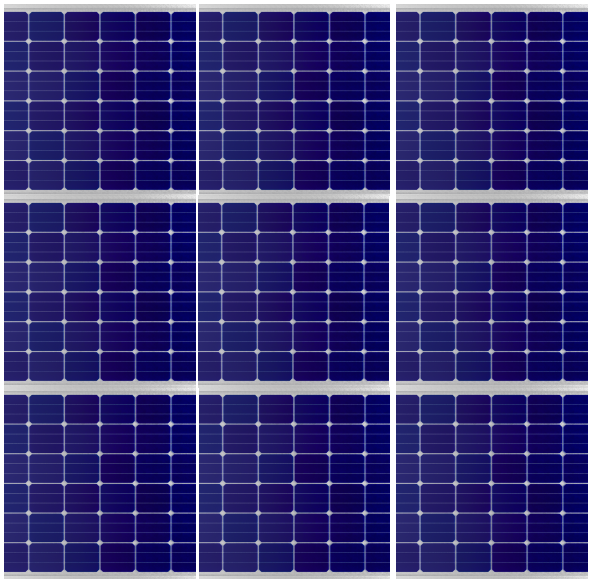
1. Cut the shape out
2. Fold just like you did with Cube A
3. Tape the edges of the cube together



Each square of 4 solar panels makes up one face of the cube:

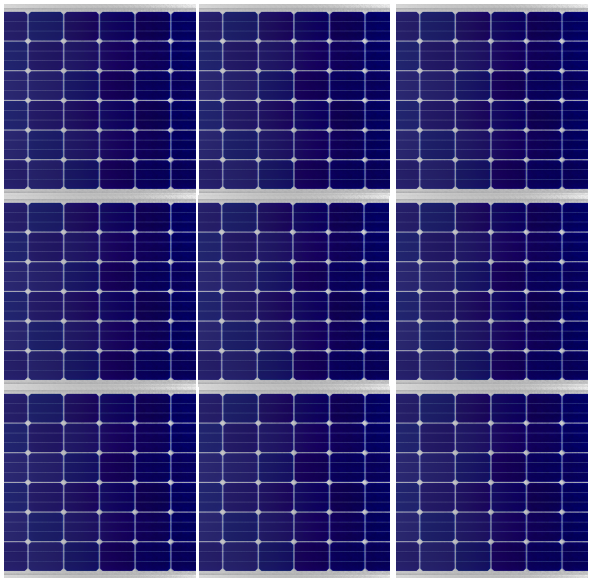


Cube C



This is a Single Face (Side) Of the Apparatus

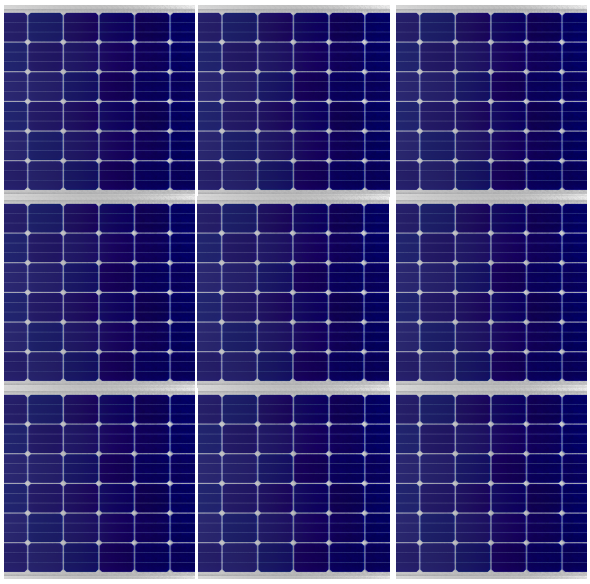
Face Number 2 of Cube C

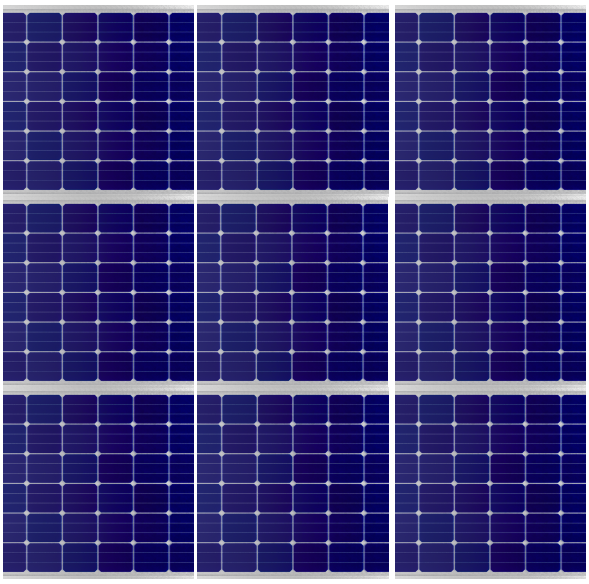


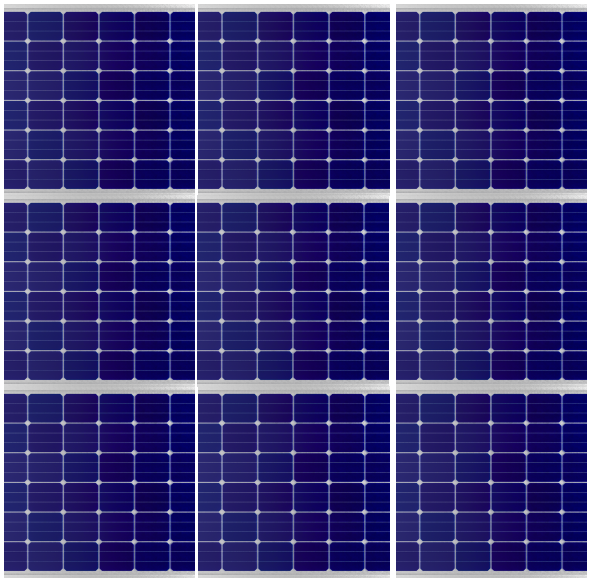
How to Assemble the Apparatus:

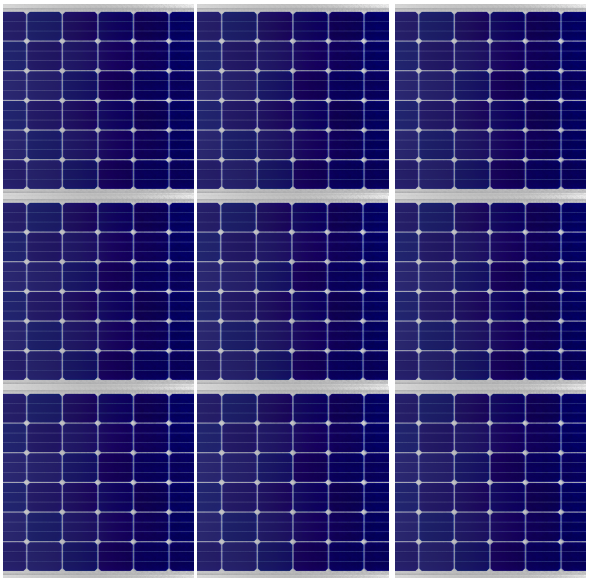
1. Cut out all six faces of side C (See the next page for the other faces)
2. Tape them together into your own 'net' like what cubes A and B looked like originally (Feel free to experiment with different ways to make nets for cubes! There are lots of ways that work :))
3. Fold your net into cube C

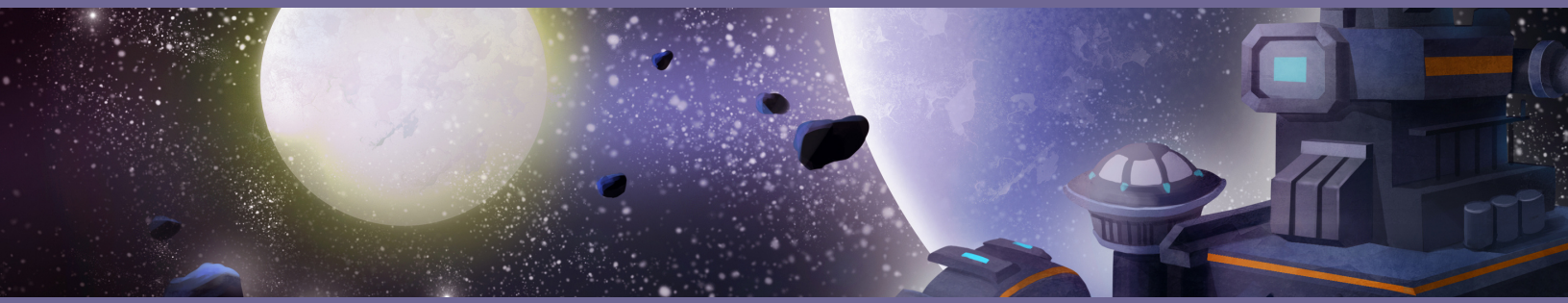
Cube C continued...







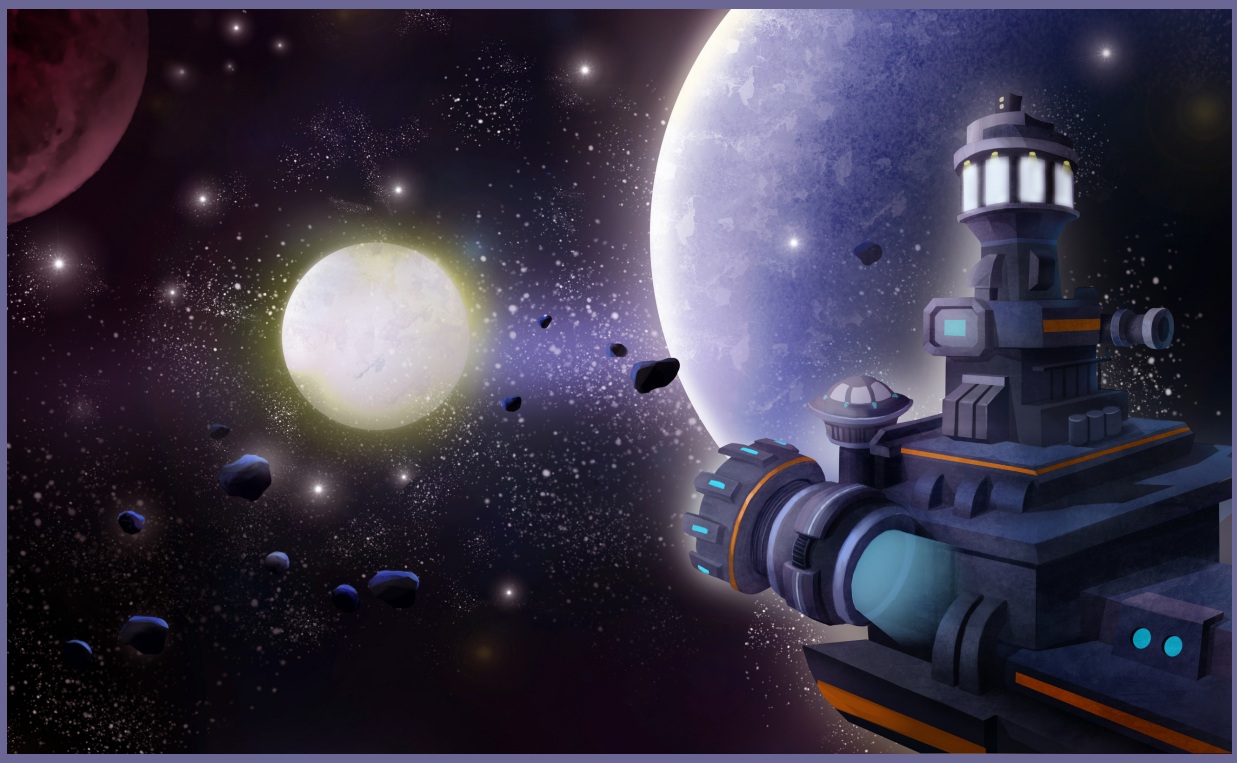




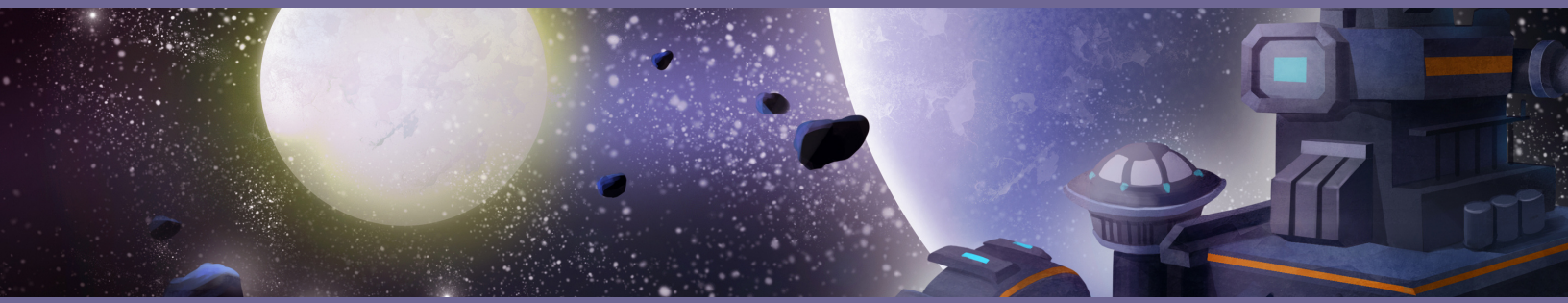
02

Table for Other Star Farers

A table for you to fill out in order to help other star farers build and calibrate their own solar cubes.



Number of Panels Along one Edge	Distance from the Star to a Panel	Number of Panels on a Single Face	Fraction of the Original Energy Each Panel Receives
1	0.5	1	1
2	1	4	1/4
3	1.5	9	1/9
4	2		1/16
5	2.5		1/25
10			
	6		
			1/400



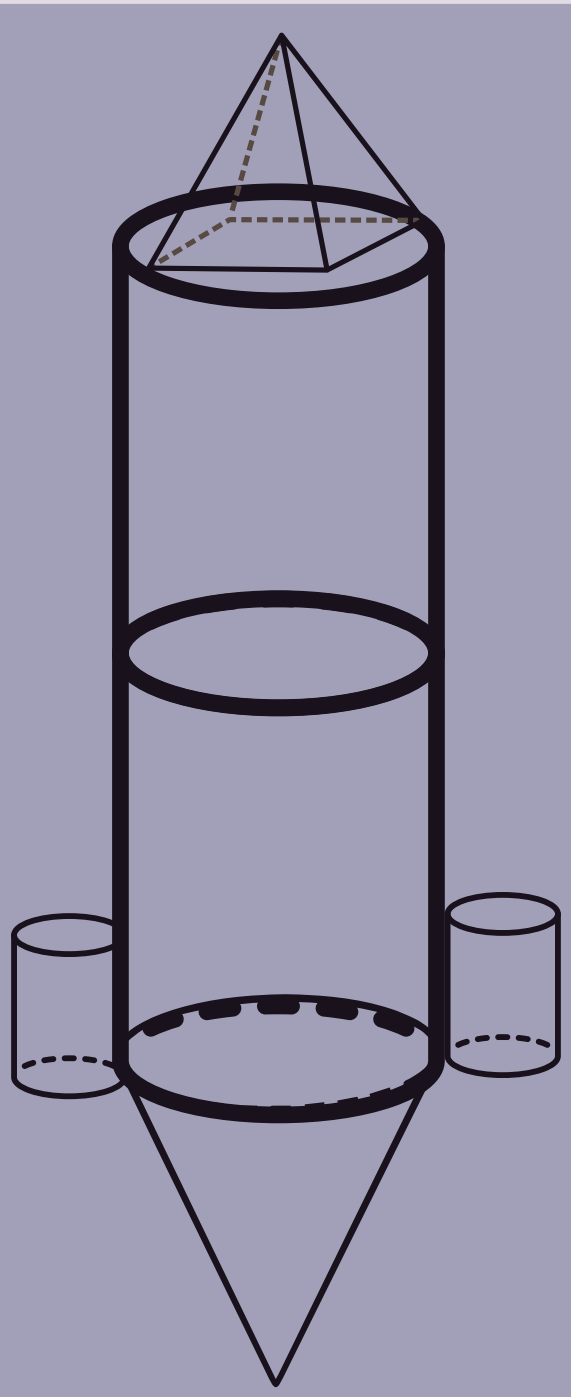
03

Spaceship Designs

Build your own spaceships! Three different designs to choose from.

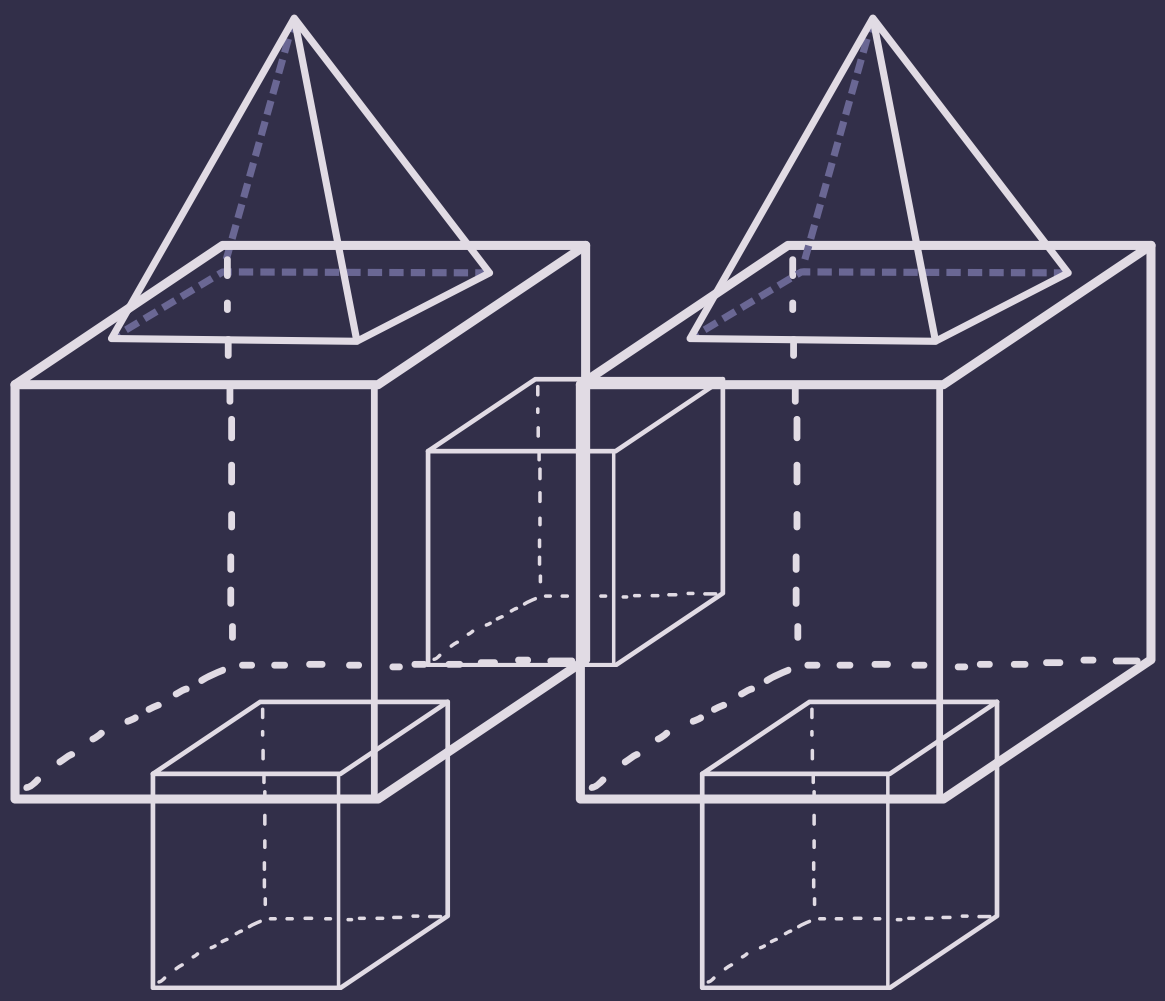
The Comet

The fastest of all the ships! When you want to reach relativistic speeds in seconds!



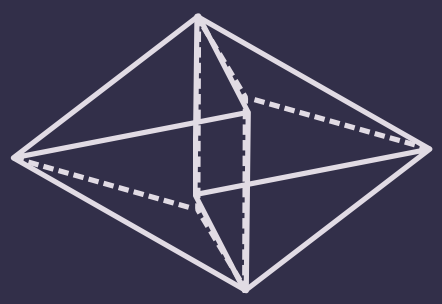
The Habitat

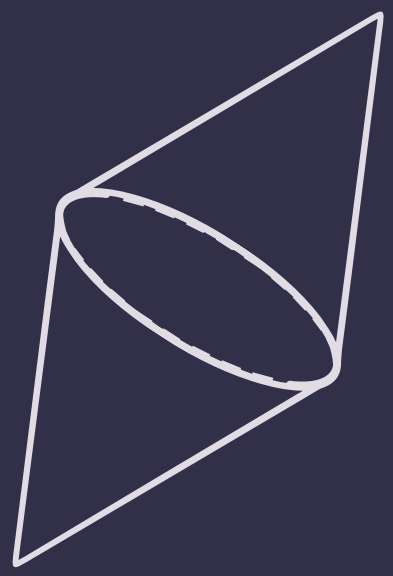
This spaceship has tons of cozy living space for all your long, interstellar voyages.

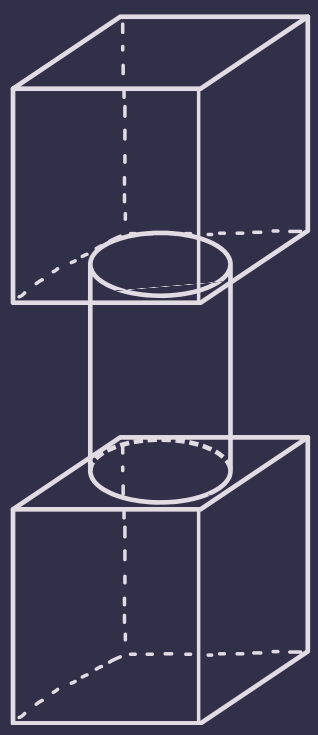


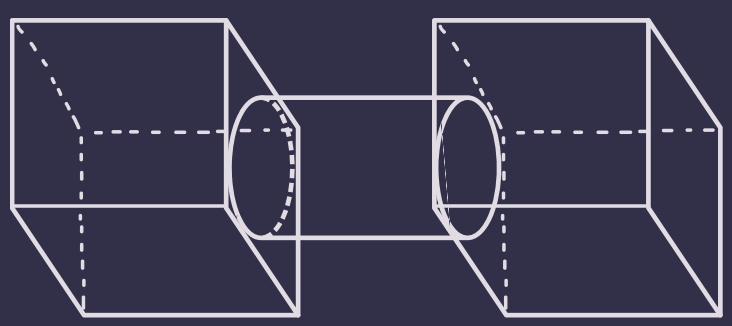
The Swarm!

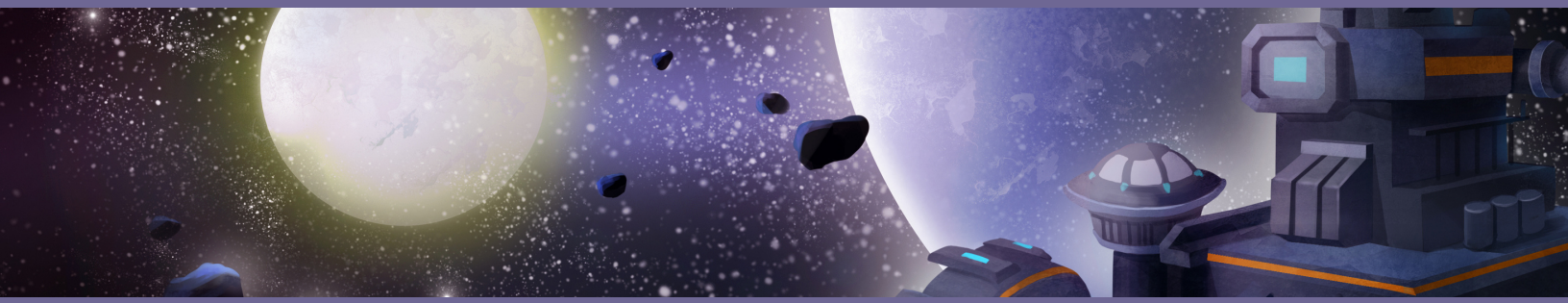
Light, agile, nimble, quick - this spaceship is more like a swarm of interstellar bees! Or badgers!









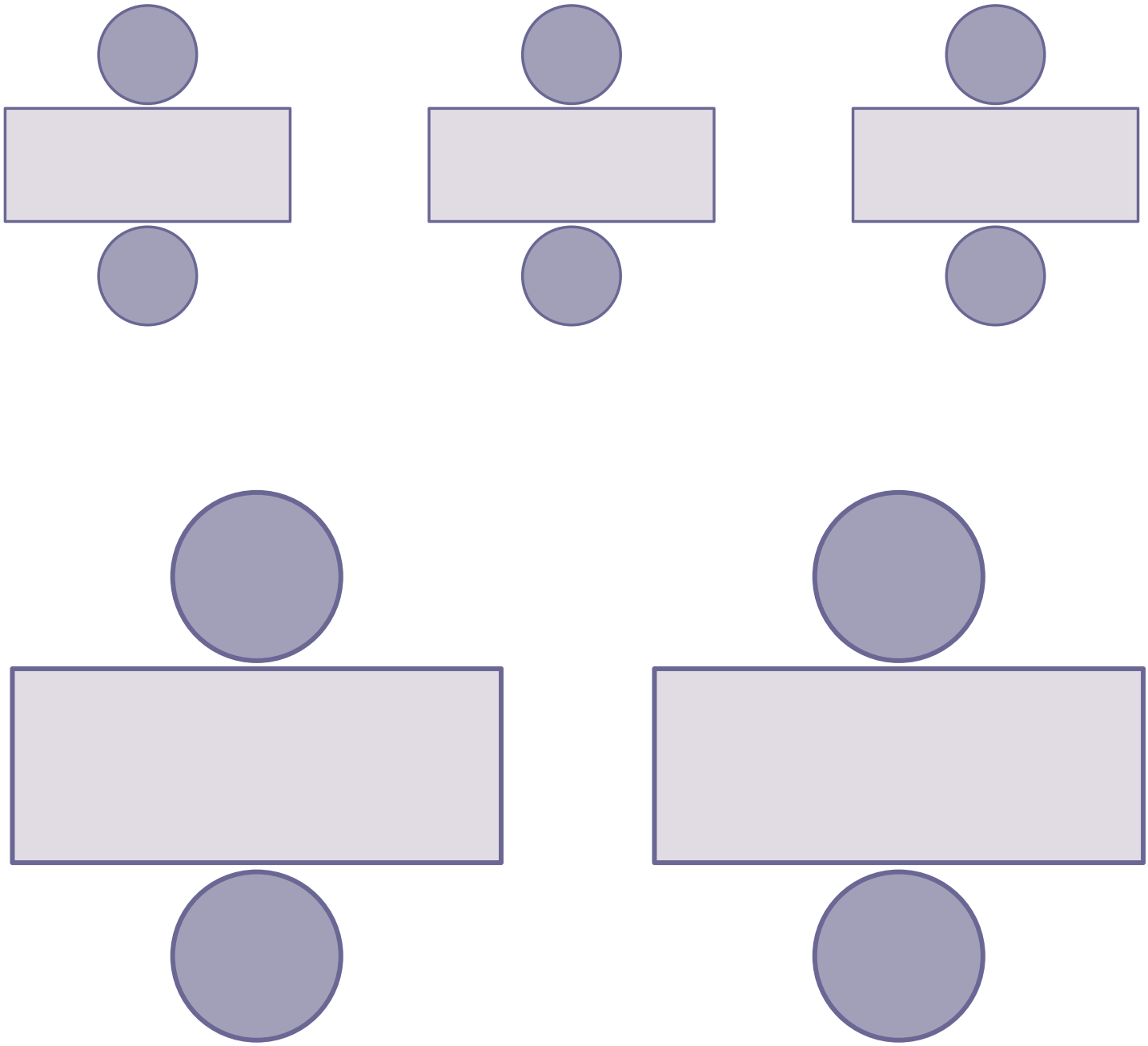


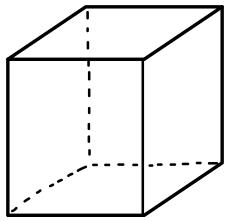
04

Geometric Nets

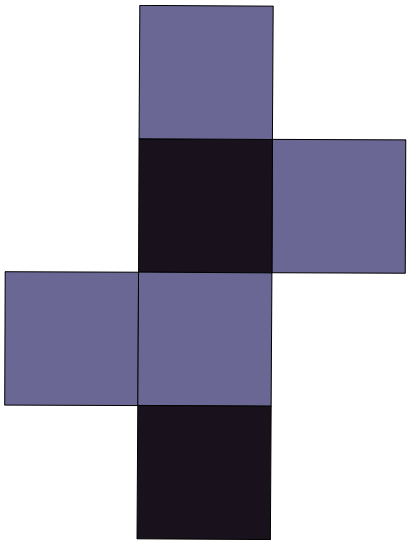
Sets of geometric nets to print out. Use these to assemble your spaceships.

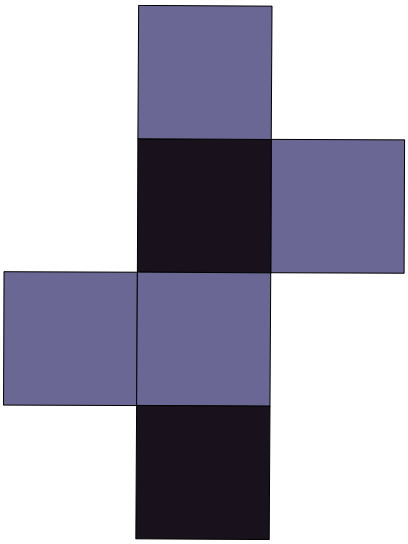
Cylinders

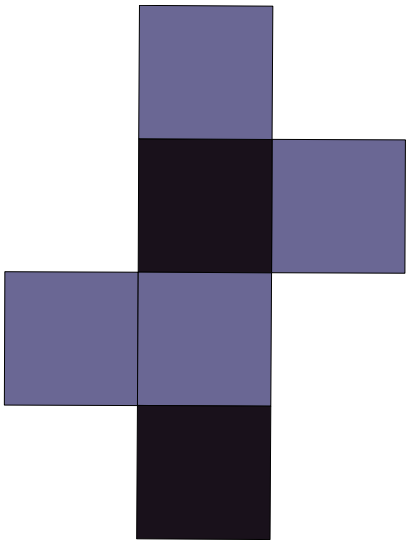


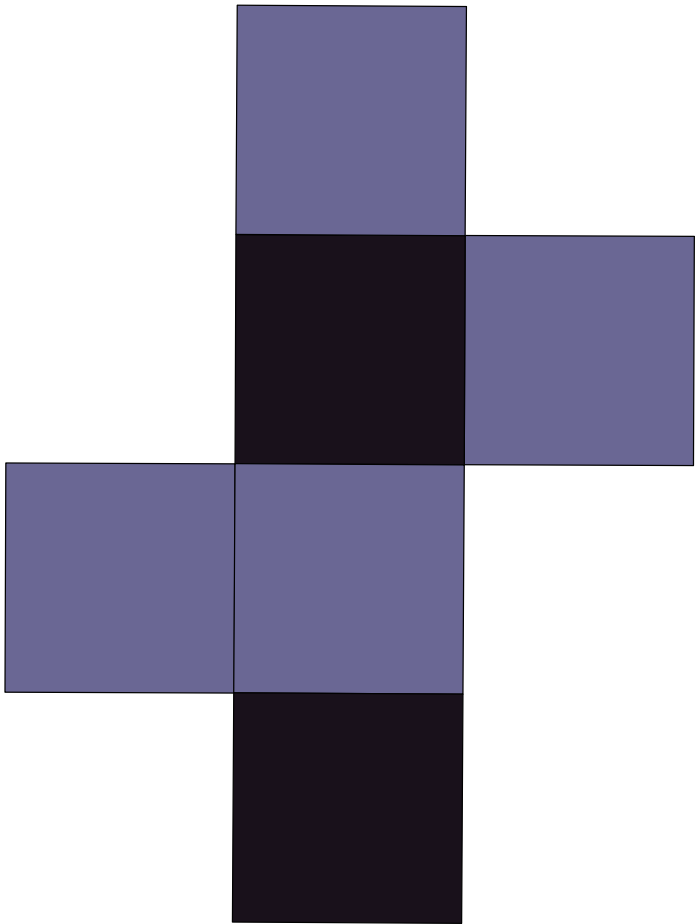


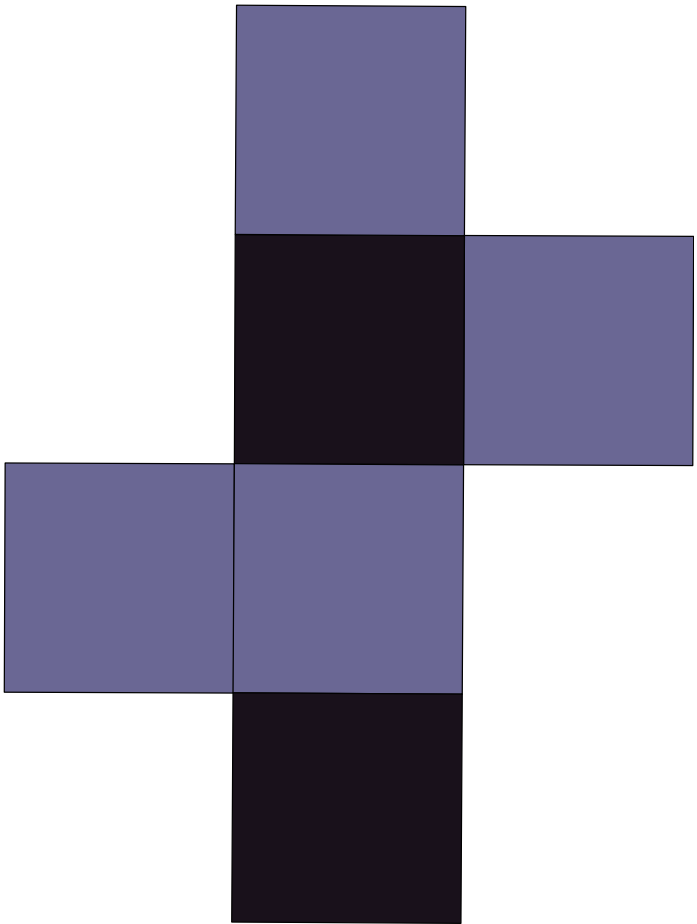
Cubes

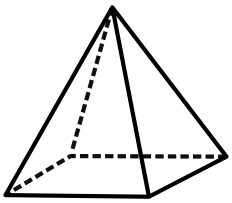




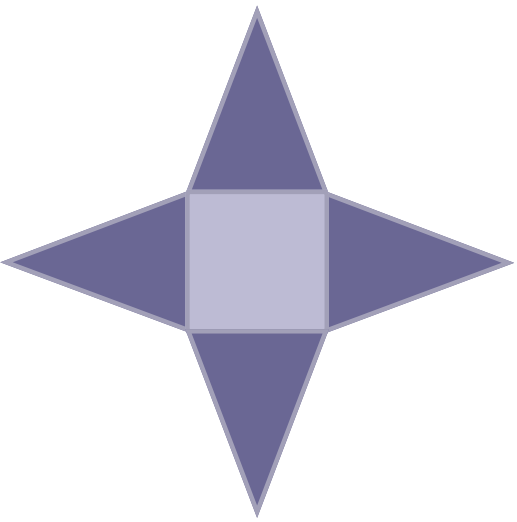


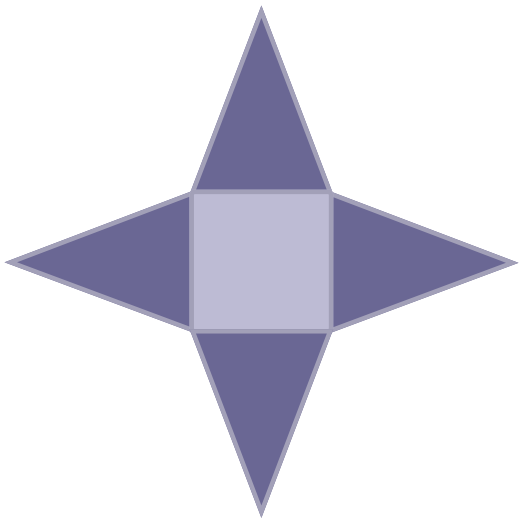


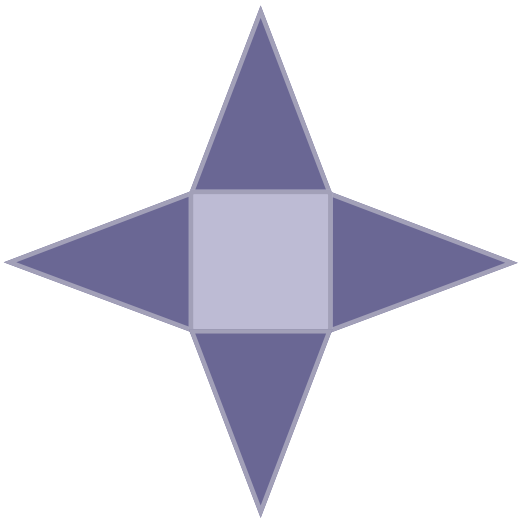


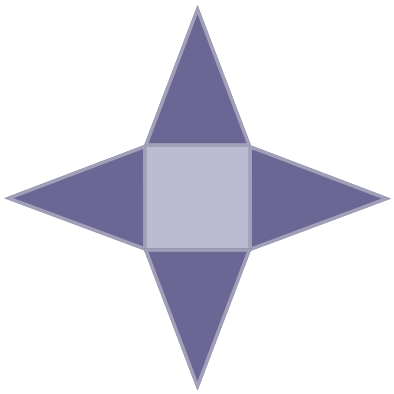


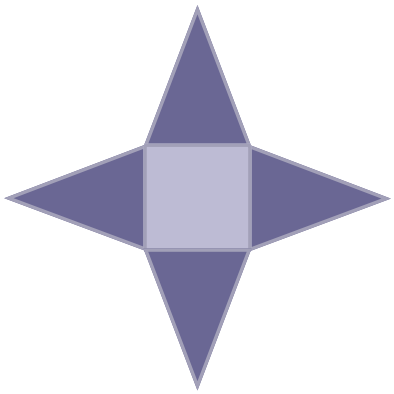
Pyramids

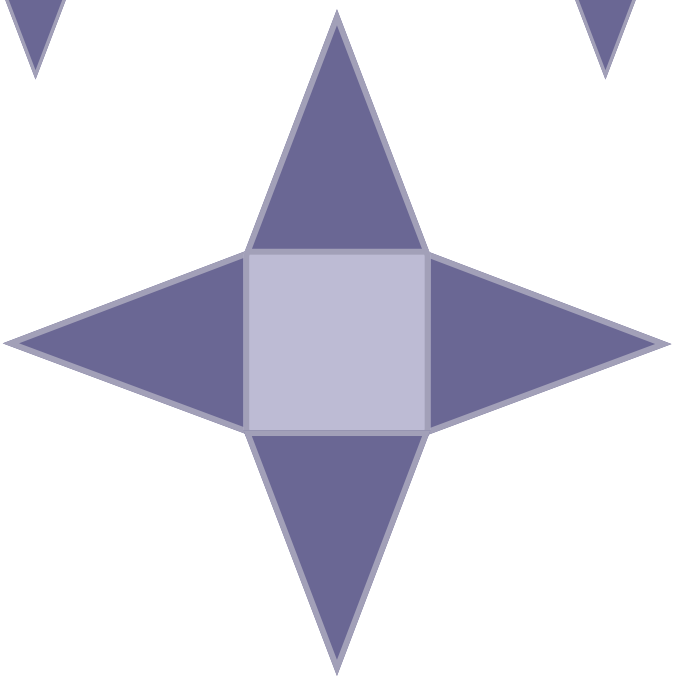


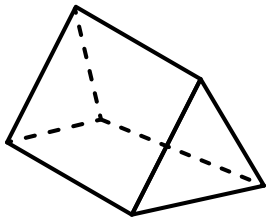




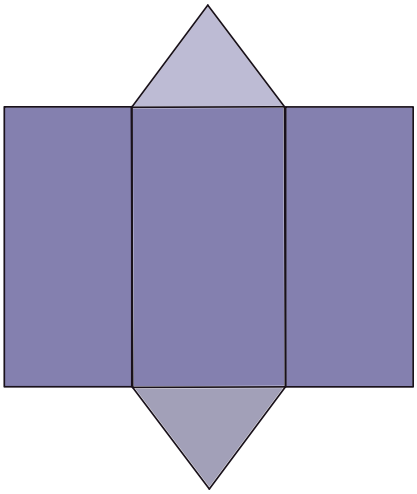


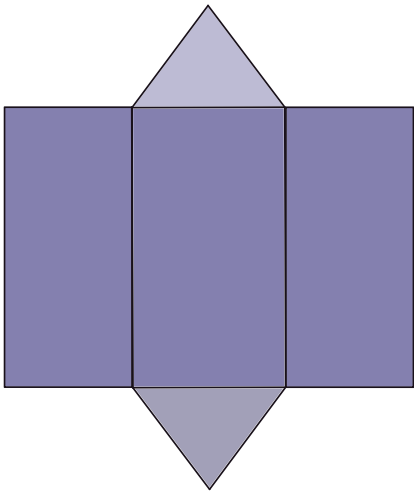


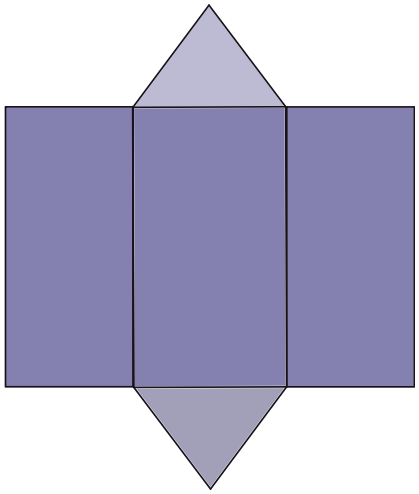


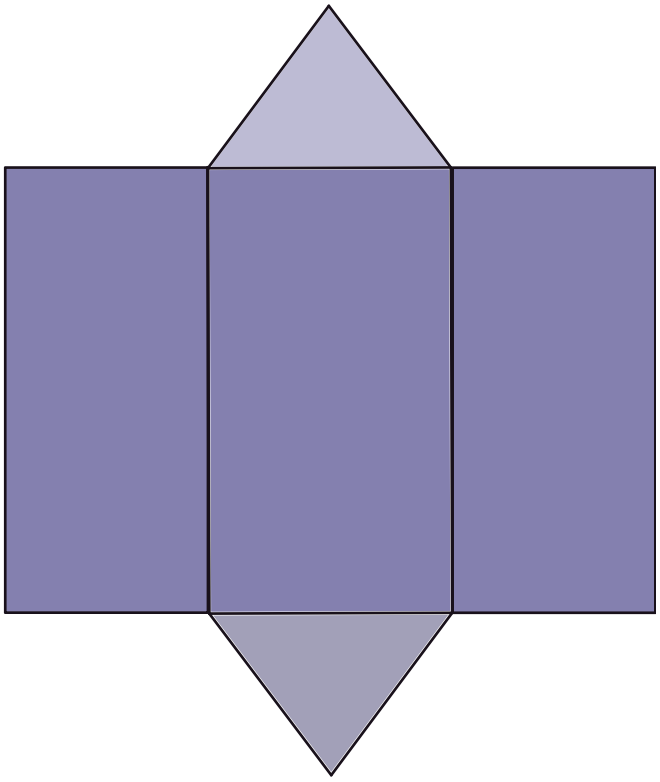


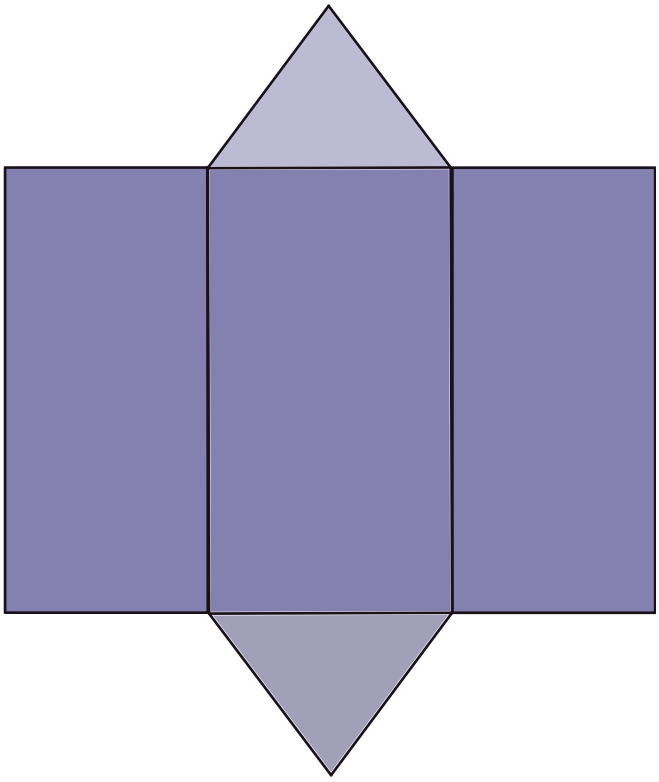
Triangular Prisms

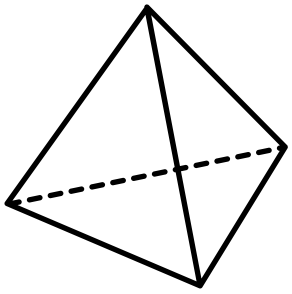




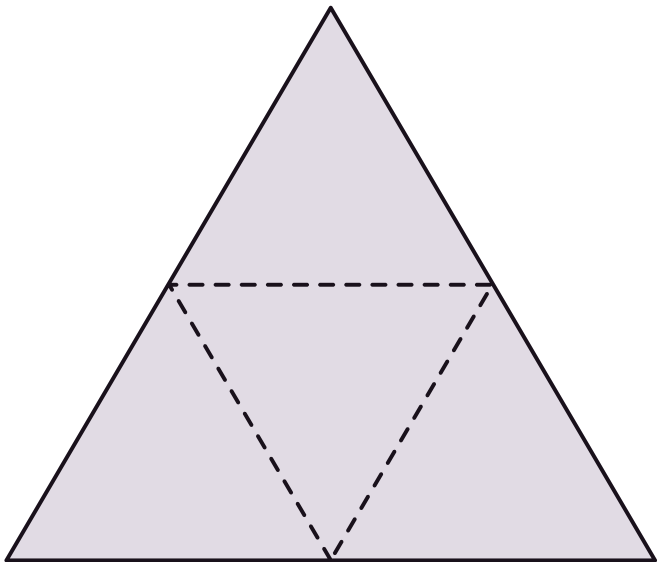


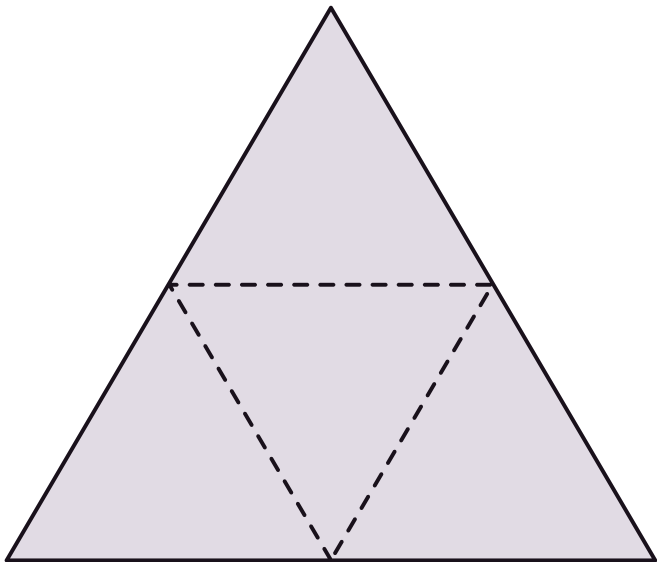


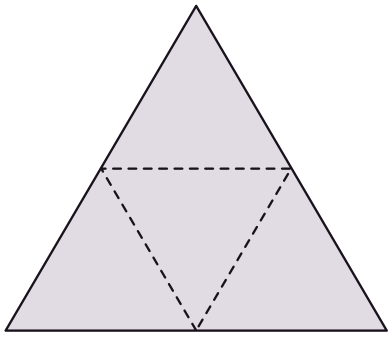


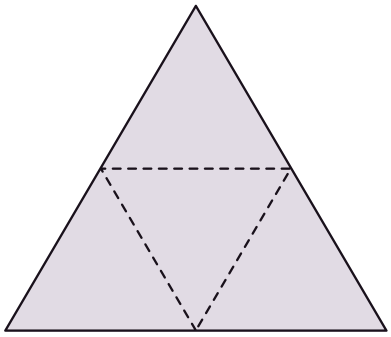


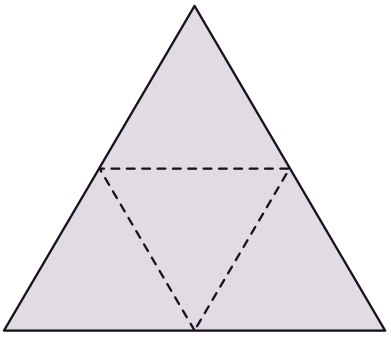
Tetrahedrons

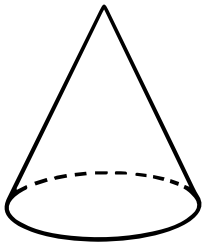
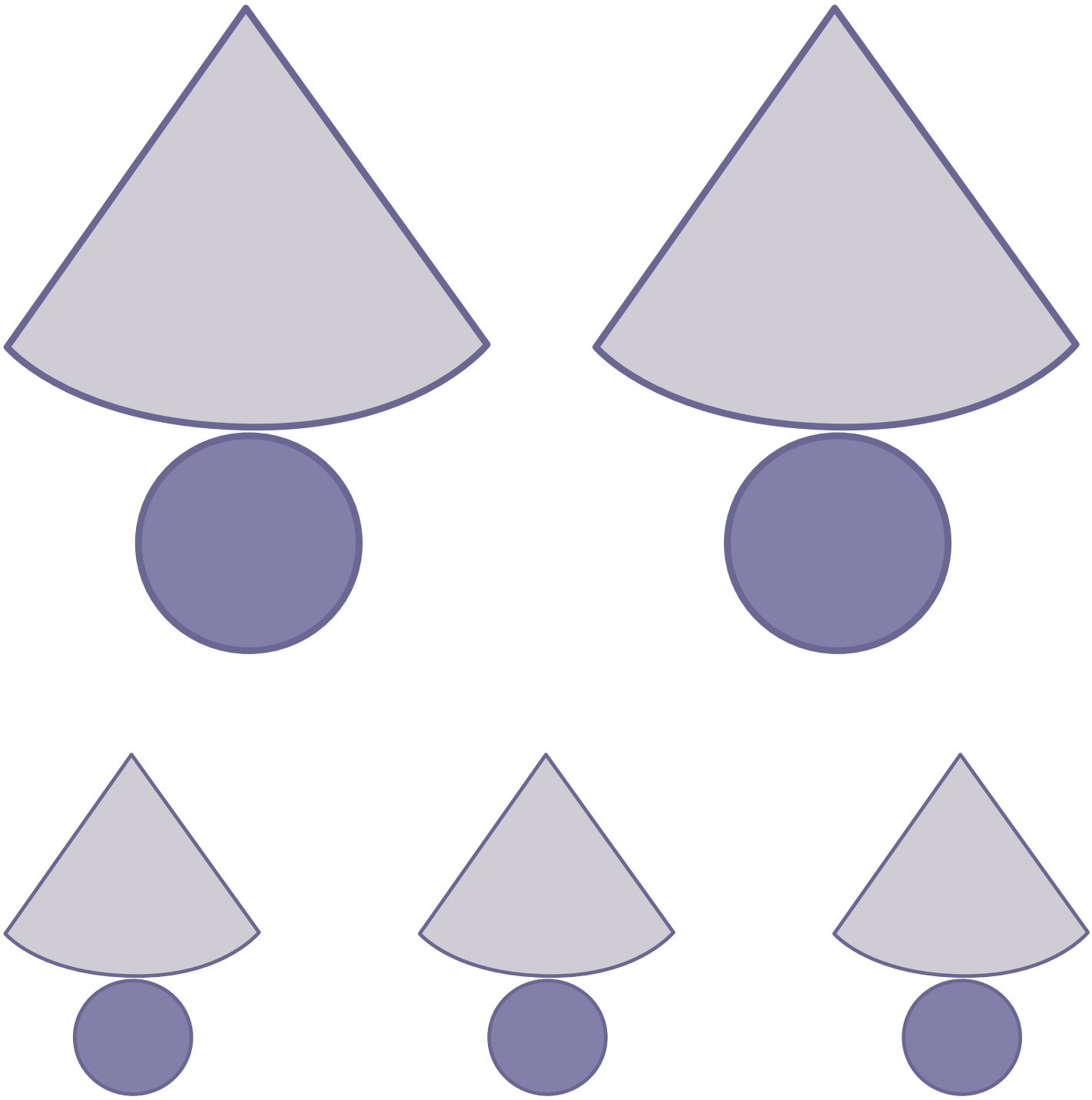








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