


Q·B·A·MAZE™ 2.0

The Next Generation Marble Maze

Which way
will the
marbles
go?

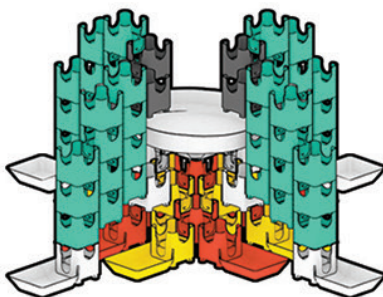
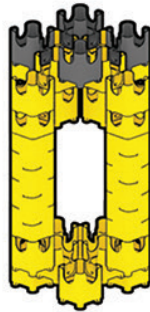
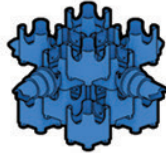


Instructions:
QBM-1 Rocket

 **WARNING:**
CONTAINS BUTTON OR COIN
CELL BATTERY. HAZARDOUS
IF SWALLOWED—SEE INSTRUCTIONS.



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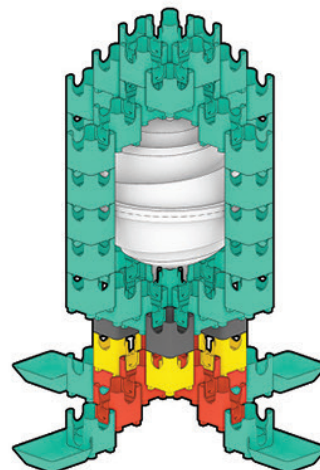
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Contents

■ single-exit cubes



■ double-exit cubes



■ bottom-exit cubes



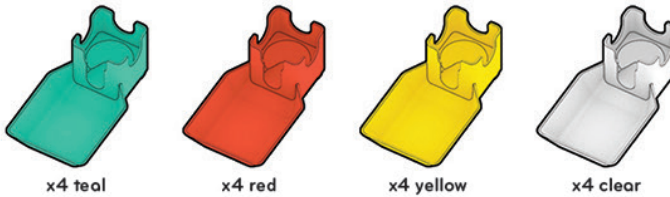
■ L-exit cubes



■ quad-exit cubes



■ marble catchers



■ light-up cubes



x4 red LED

■ marble bag



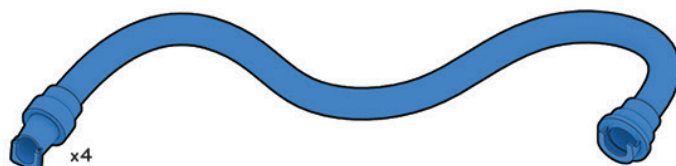
x1

■ marbles



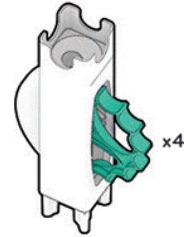
x40

■ coaster tubes



x4

■ speed sprockets



x4

■ cascade stilts



x4

■ marble vortex



x1

■ spiral sphere



x1

■ roto catcher

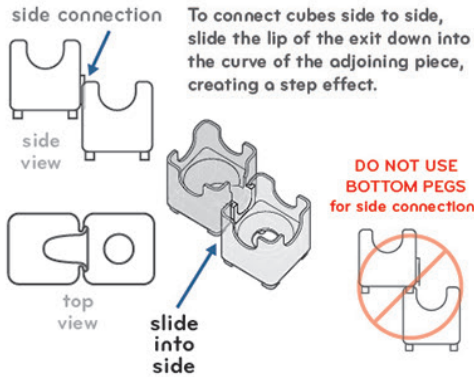


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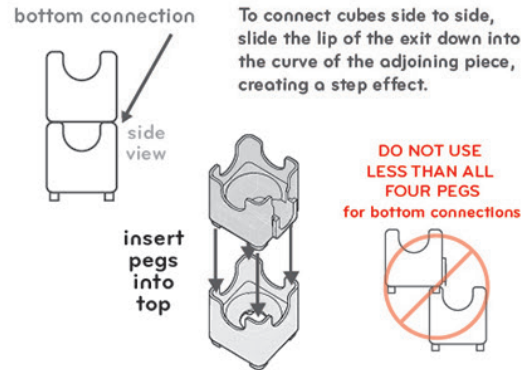
Getting Started

How to connect cubes

■ make steps

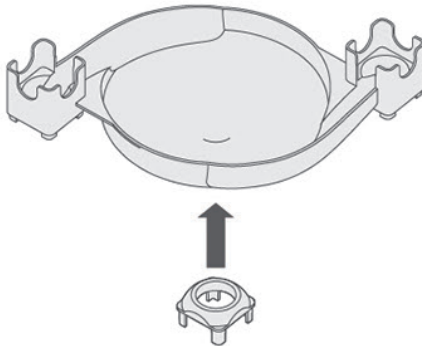


■ make stacks



Marble Vortex

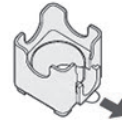
connect a universal connector to the marble vortex



Light-up Cubes

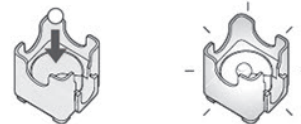
■ remove tab before use

Light-up cubes will not work until tab is pulled.



■ marble activated

Cubes light-up when center of cube is pressed.



Battery Information

⚠ WARNING: This product contains a Button or Coin Cell Battery. A swallowed Button or Coin Cell Battery can cause internal chemical burns in as little as two hours and lead to death. Dispose of used batteries immediately. Keep new and used batteries away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

4 lithium coin cell CR2032 3V batteries included.

To change battery, simply remove the screw to access the battery compartment, remove the battery and insert the new one following the polarity guide.

- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries.
- Non-rechargeable batteries are not to be recharged.
- Batteries are to be inserted with the correct polarity.
- Exhausted batteries are to be removed from the toy.
- The supply terminals are not to be short-circuited.

Base Module

Exhaust from burning fuel exits through the base of a rocket to push it skyward. In the QBM-1 Rocket, fiery red light-up cubes provide an impressive display before the marbles finally come to rest in the stabilizing Marble Catcher fins of this Base Module.

Parts Needed

■ single-exit cubes



x28 teal



x4 dark gray

■ double-exit cubes



x12 teal



x4 yellow

■ bottom-exit cubes



x4 teal



x4 yellow

■ L-exit cubes



x4 dark gray



x4 red

■ quad-exit cubes



x1 red

■ light-up cubes



x4 red LED

■ marble catchers



x4 red



x4 yellow

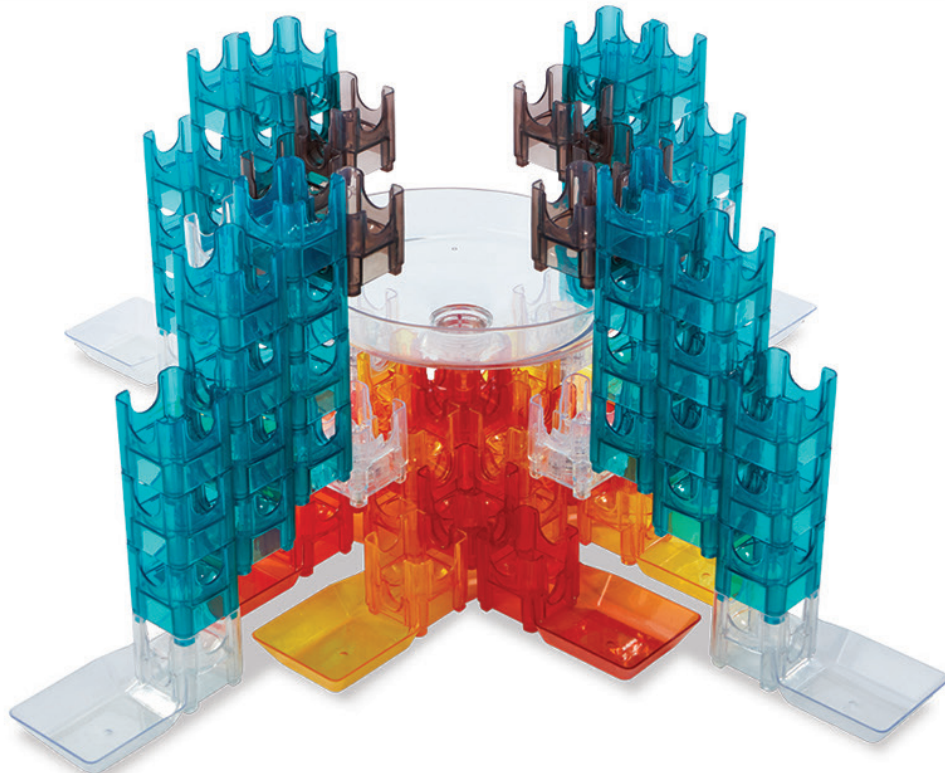


x4 clear

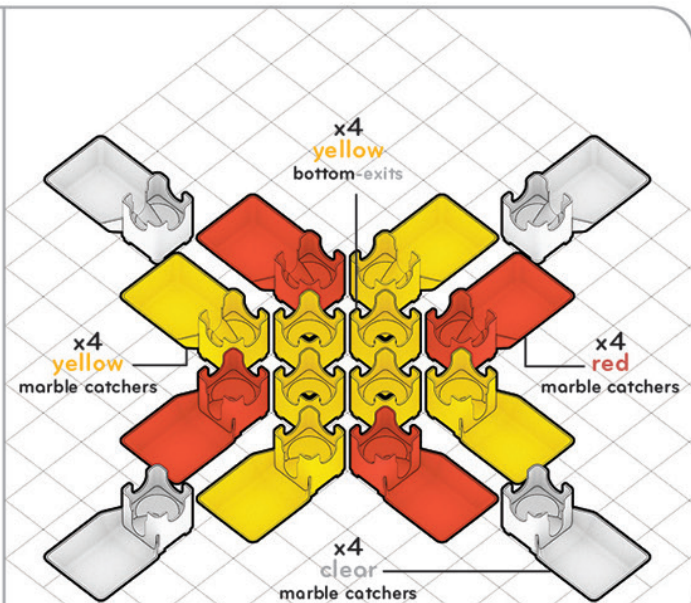
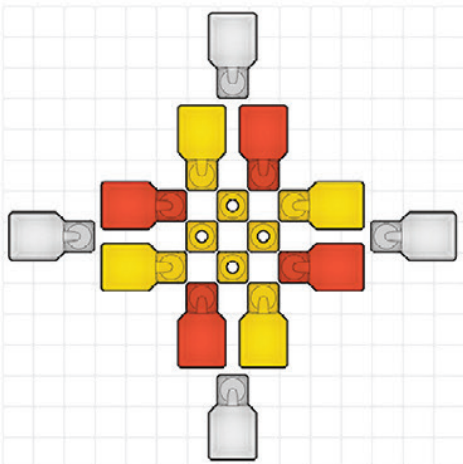
■ marble vortex



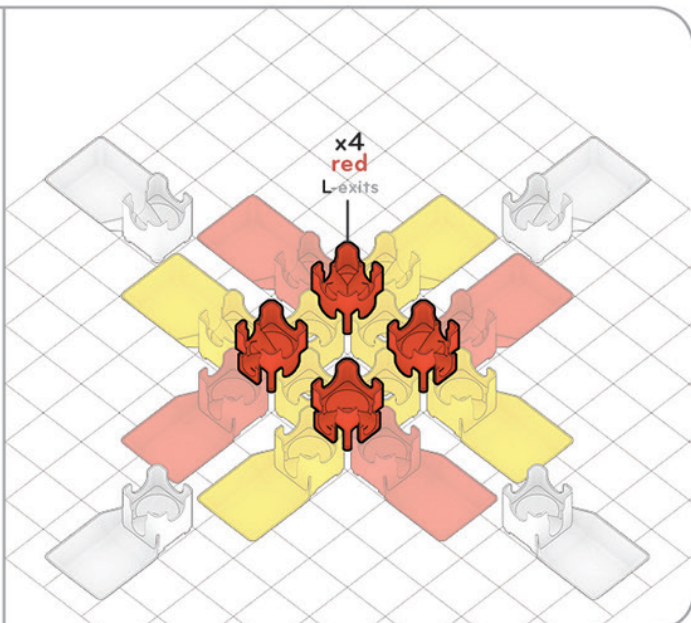
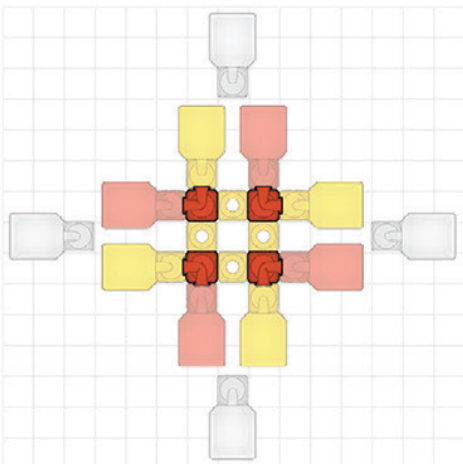
x1



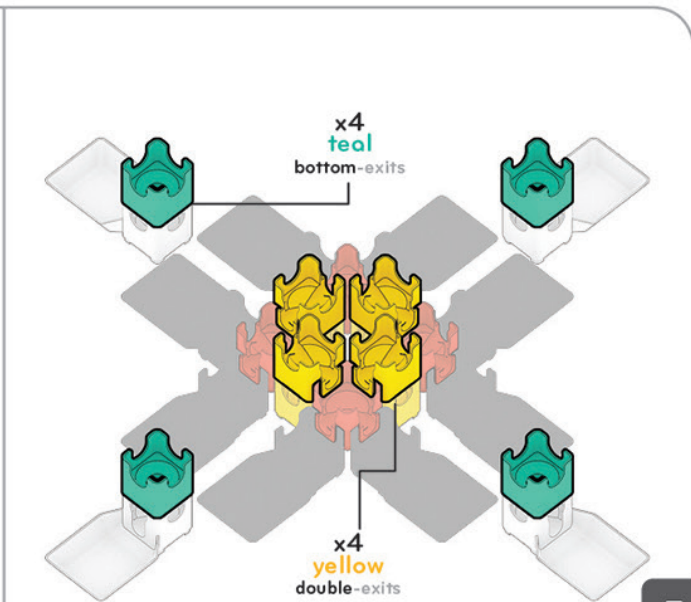
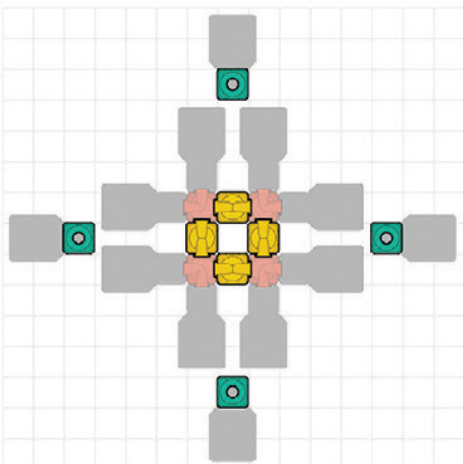
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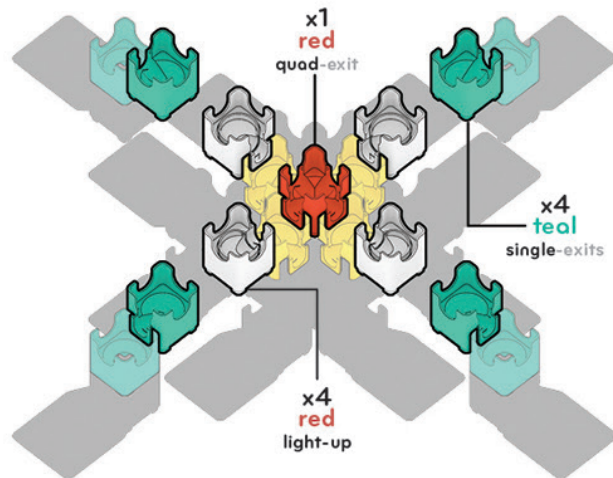
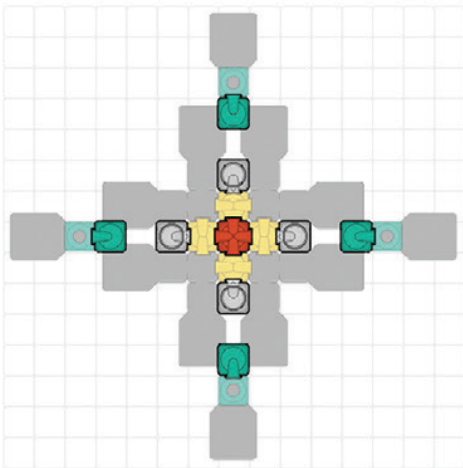
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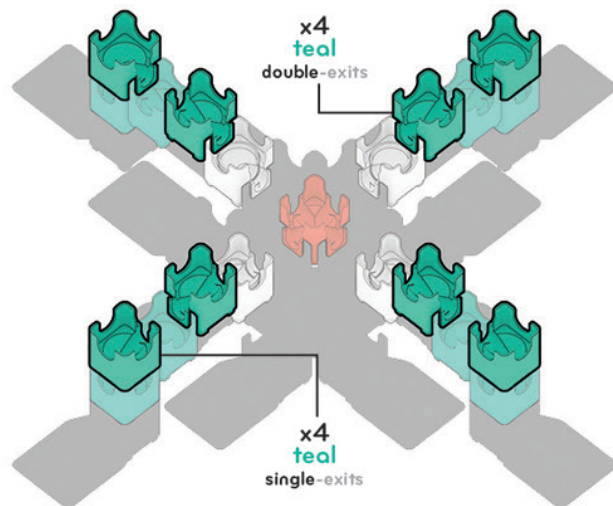
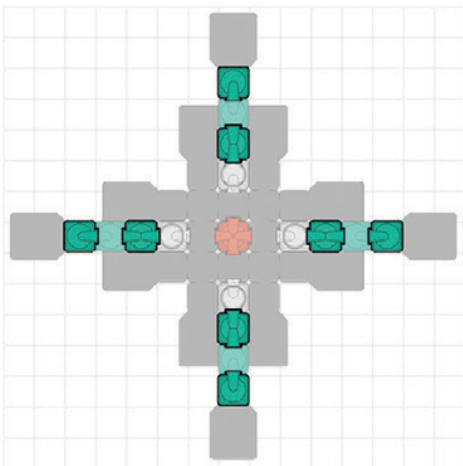
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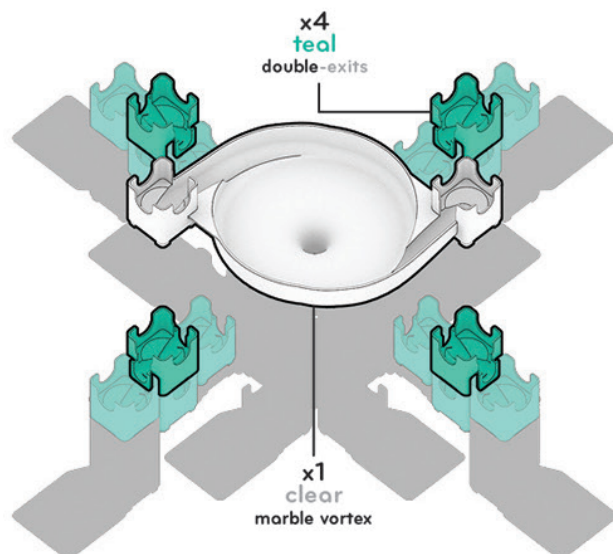
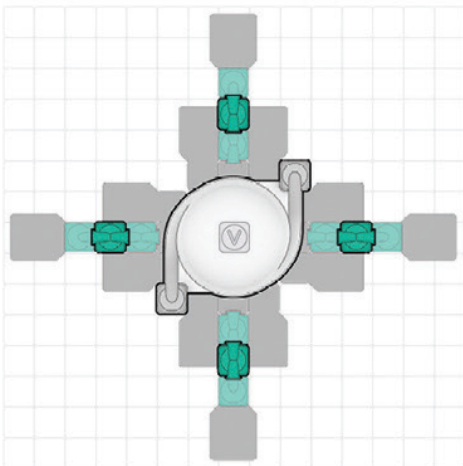
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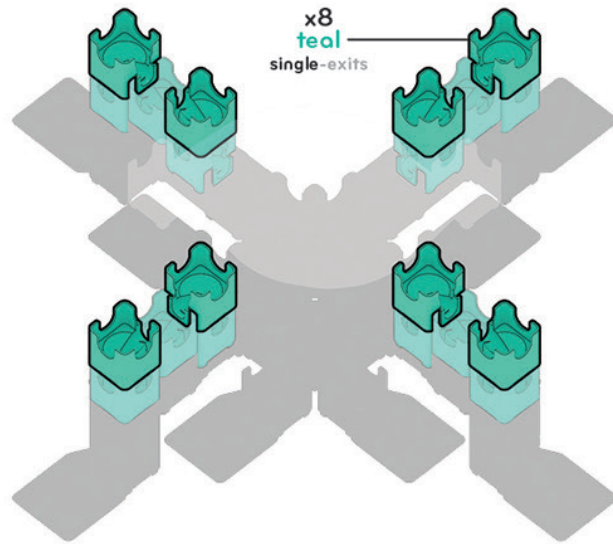
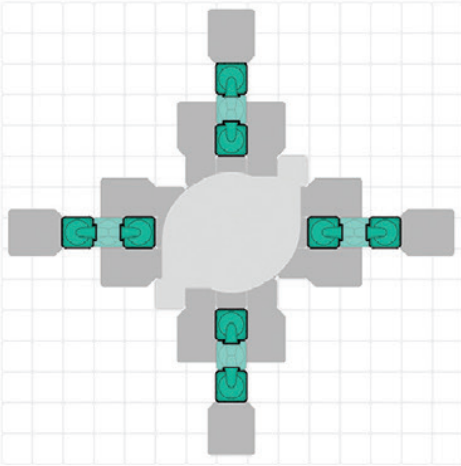
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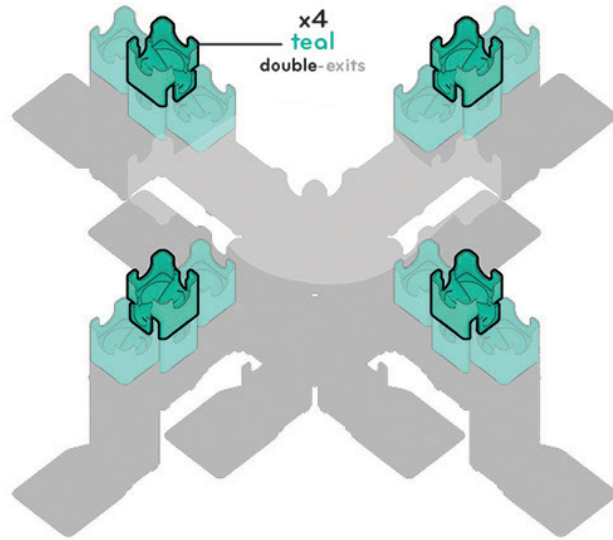
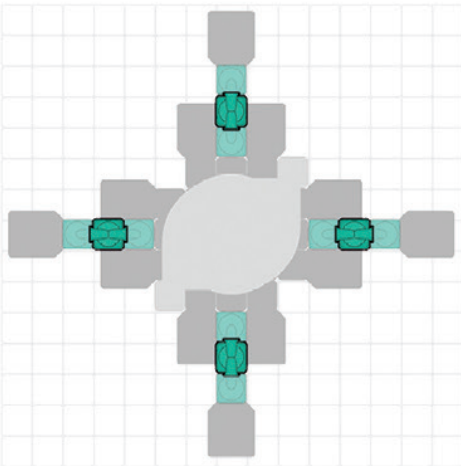
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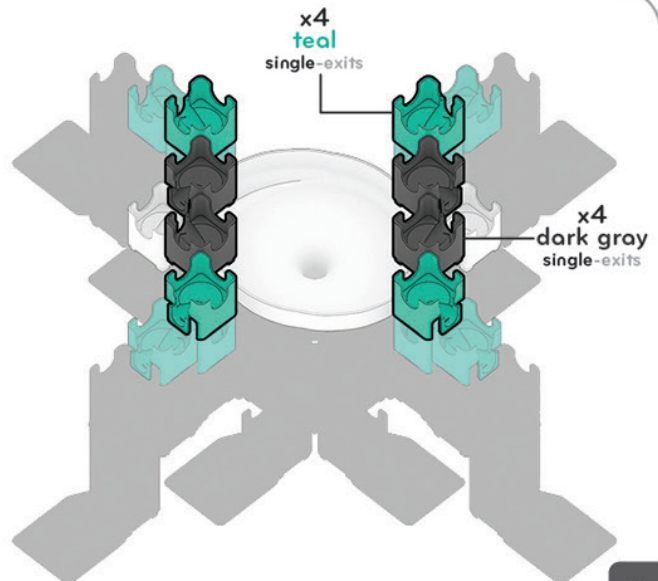
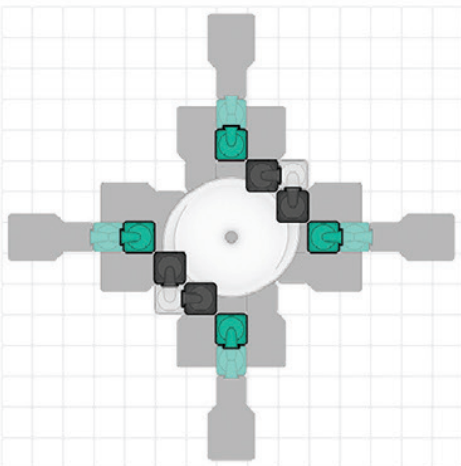
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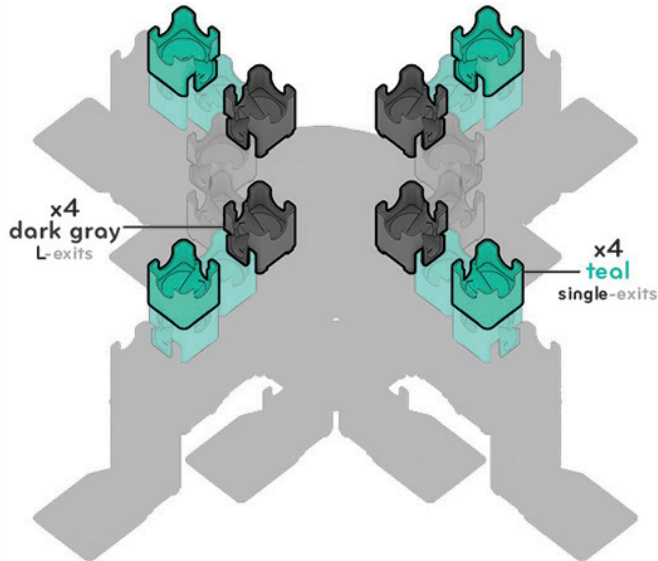
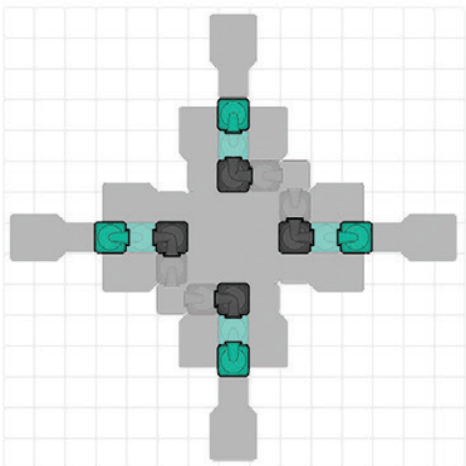
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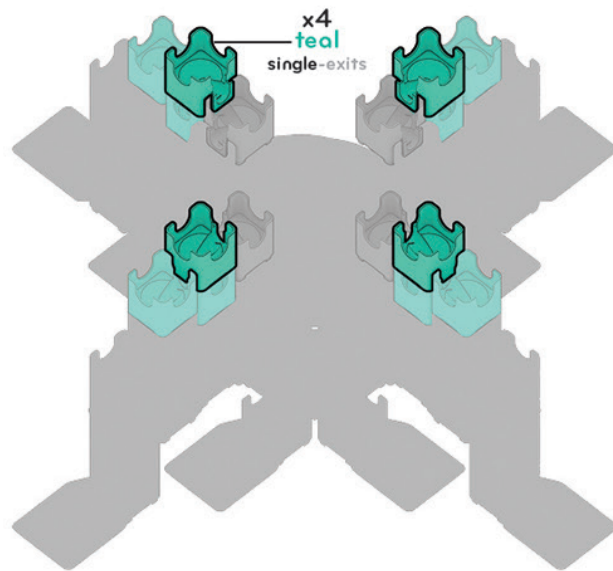
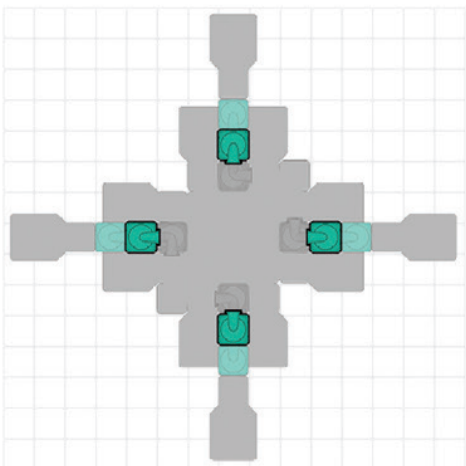
9



10



11



Set aside Base Module for Rocket Assembly on pages 31 - 32

Rocket Engine Module

The engine is what powers a rocket to launch into space. In the Rocket Engine Module you build, the Roto Catcher's spinning yellow and blue paddles represent the fuel and oxygen mixing as it sends marbles funneling down.

Parts Needed

■ single-exit cubes



x16 red x12 dark gray

■ double-exit cubes



x8 red

■ bottom-exit cubes



x12 red

■ L-exit cubes



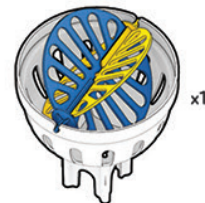
x4 red

■ quad-exit cubes



x1 dark gray

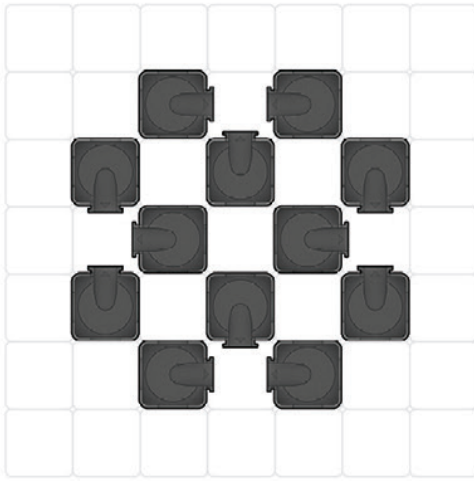
■ roto catcher



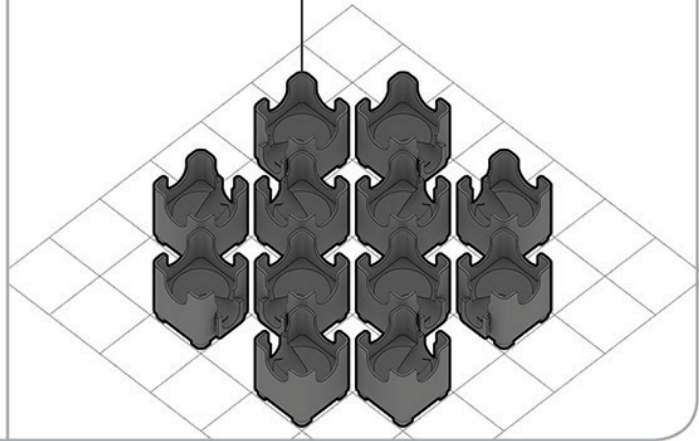
x1



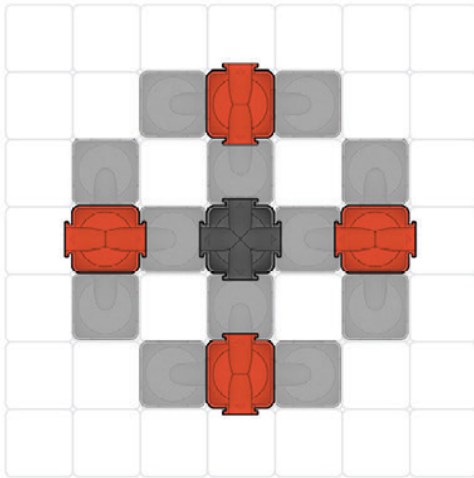
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x12
dark gray
single-exits

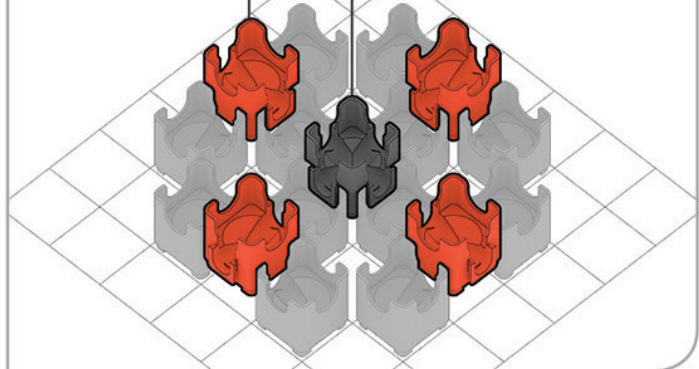


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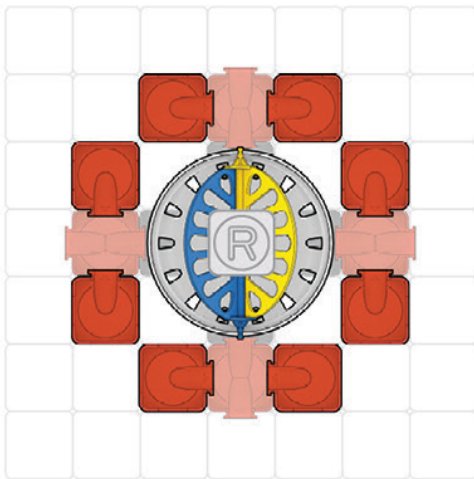


x1
dark gray
quad-exit

x4
red
double-exits

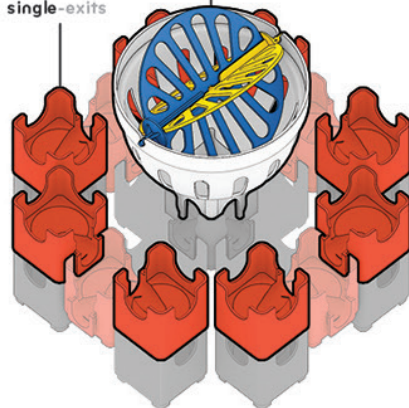


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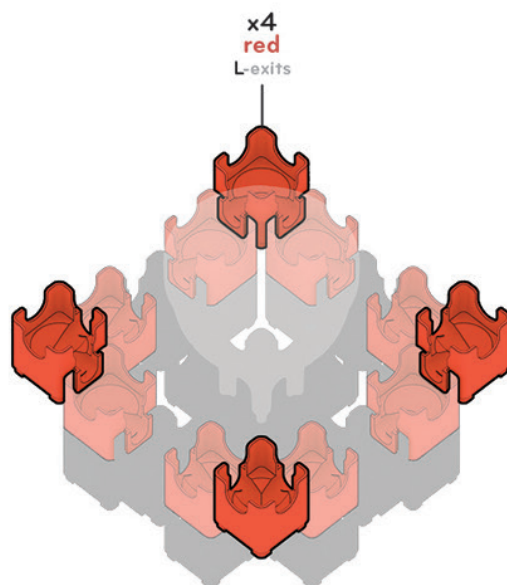
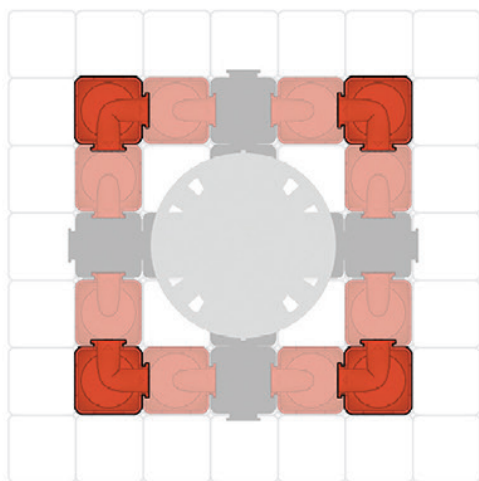


x1
roto catcher

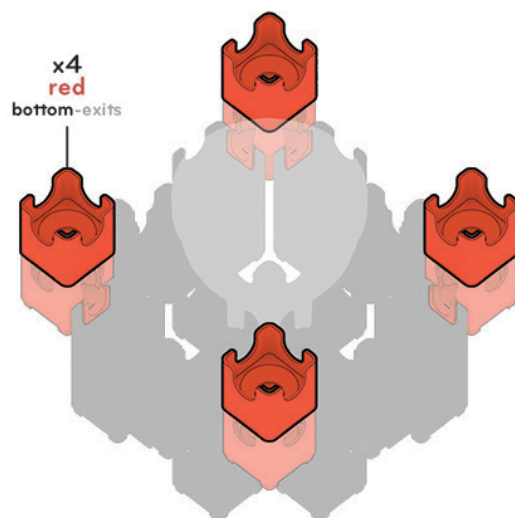
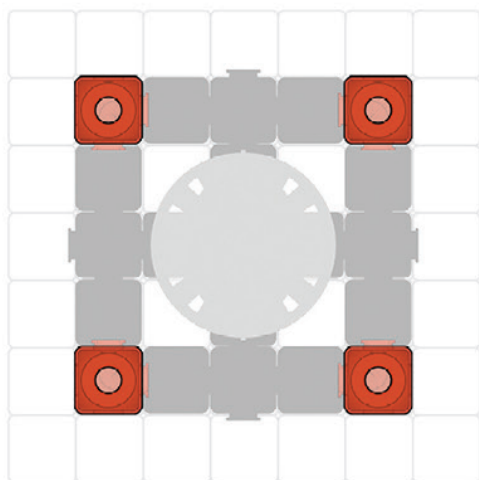
x8
red
single-exits



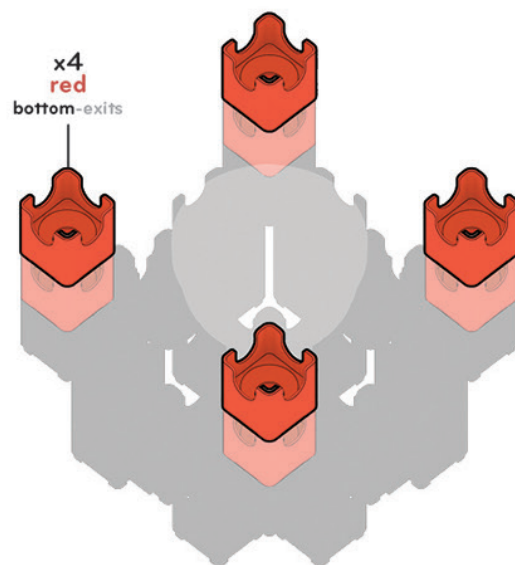
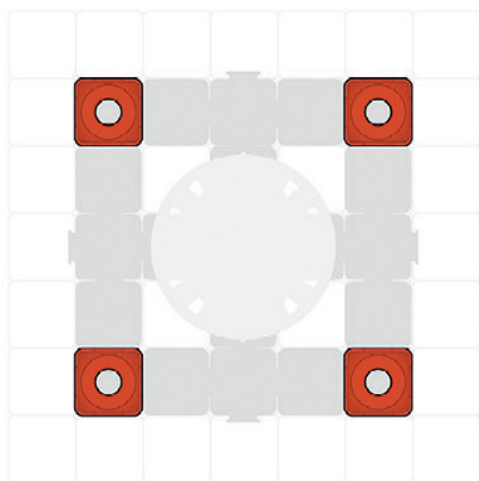
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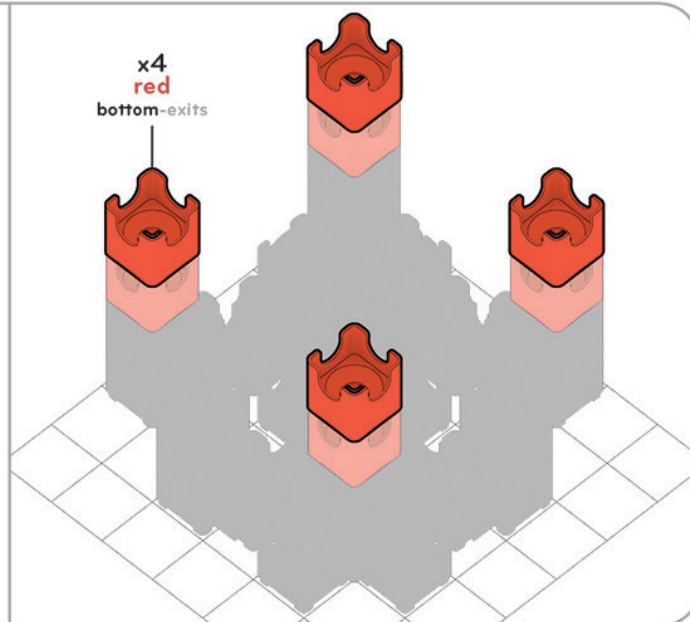
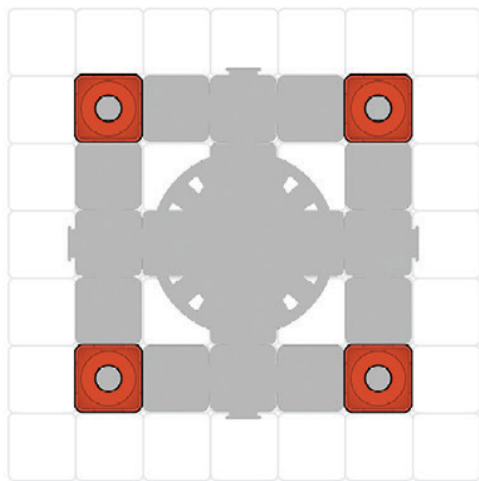
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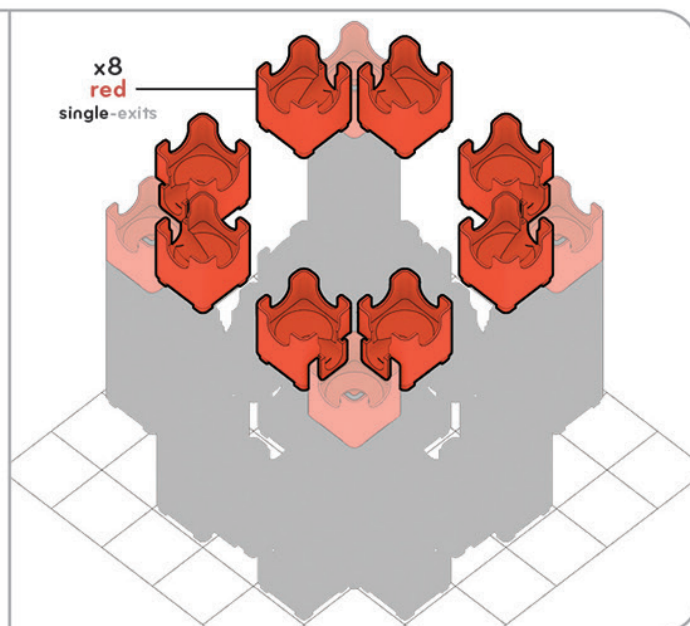
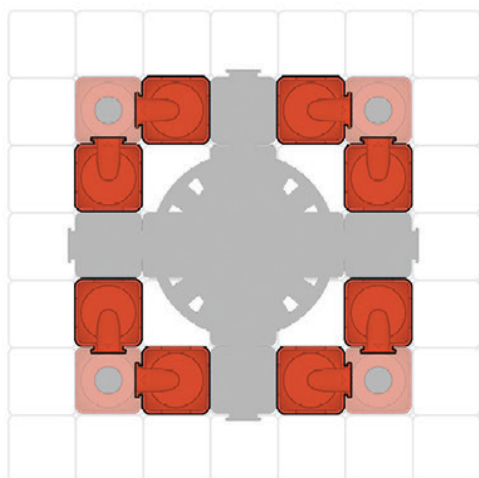
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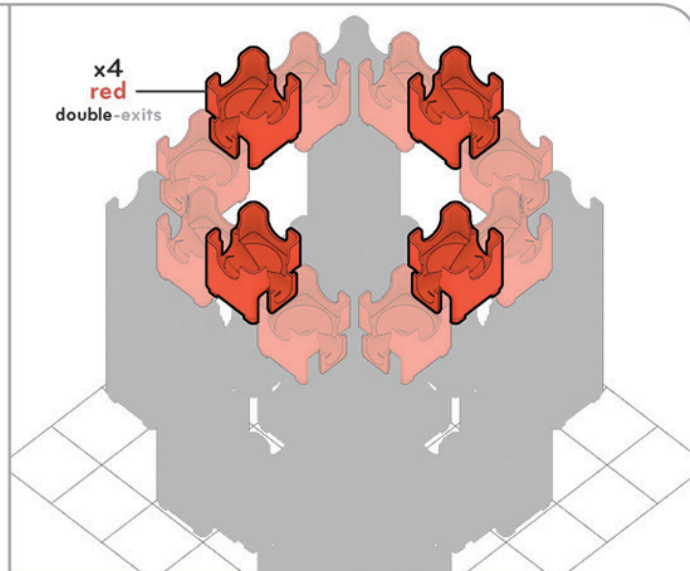
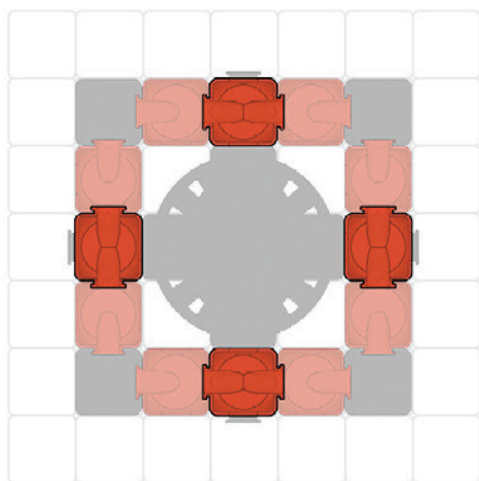
7



8



9



Pump Module

Instead of pumping fuel and oxygen, Speed Sprockets spin marbles into the engine of the QBM-1 Rocket.

Parts Needed

■ double-exit cubes



x4 dark gray

■ bottom-exit cubes

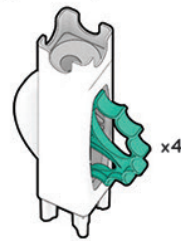


x4 dark gray



x1 clear

■ speed sprockets



x4

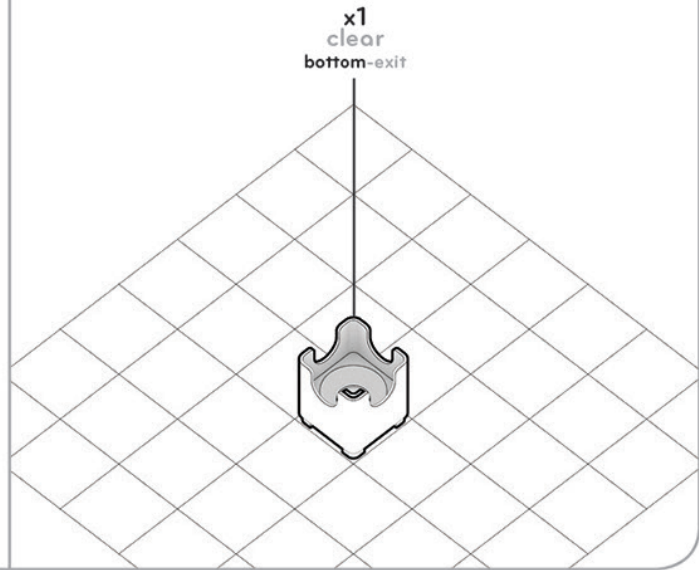
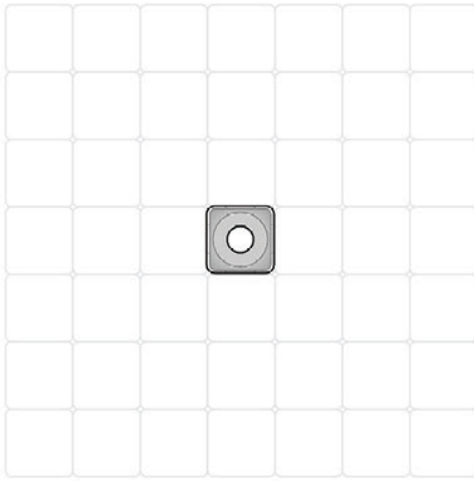
■ L-exit cubes



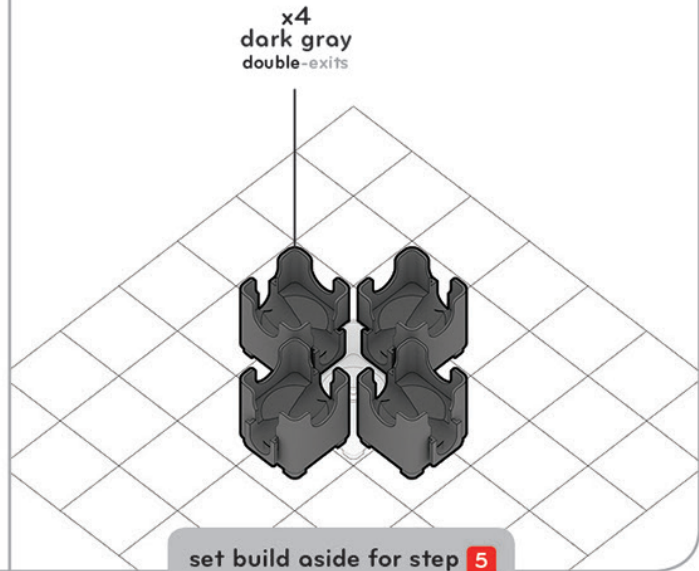
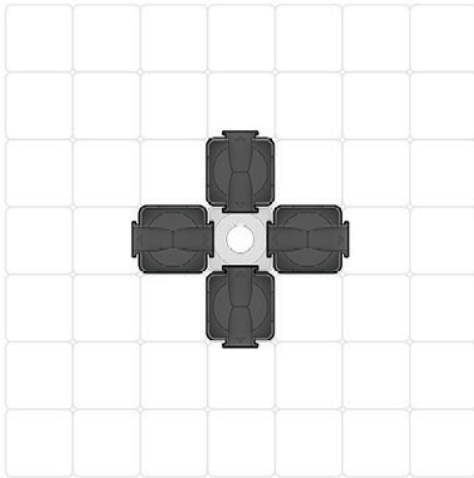
x4 dark gray



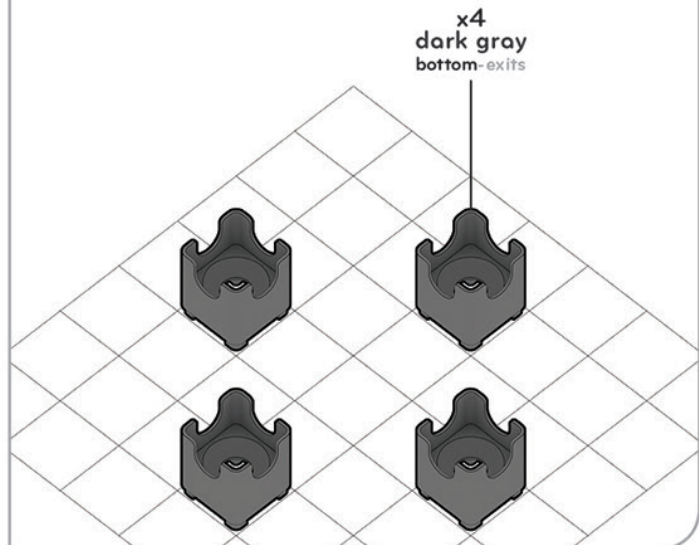
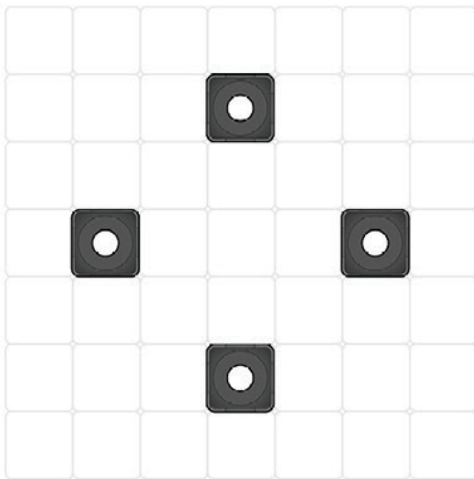
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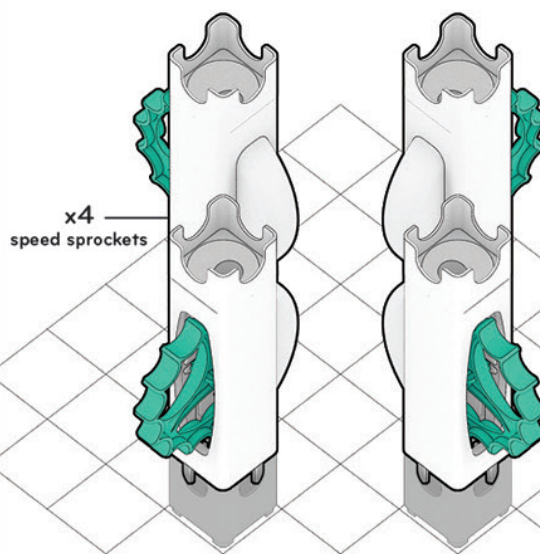
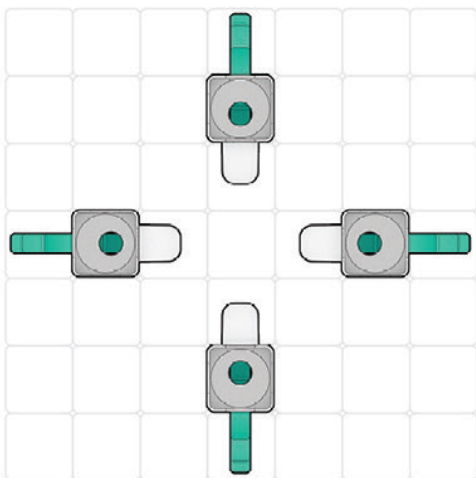
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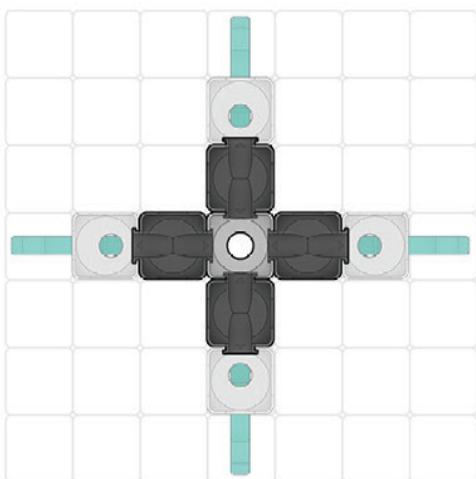
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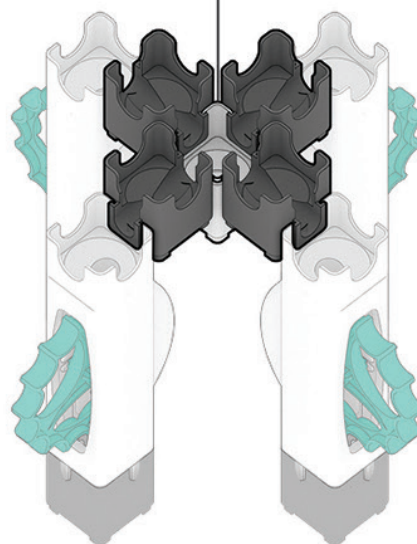
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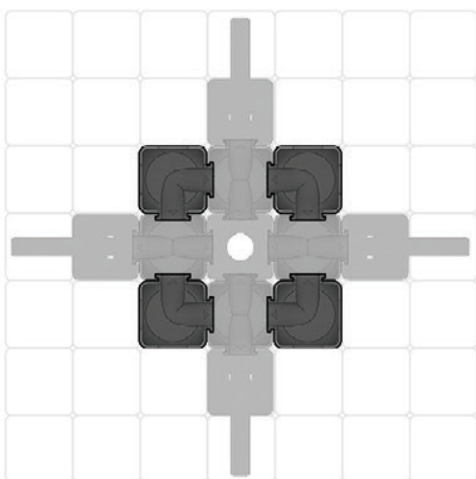
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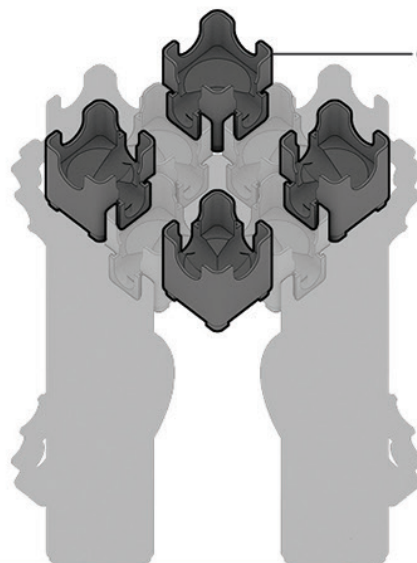
attach build from step 2 here



6



x4
dark gray
L-exits



Fuel Tank Module

Fuel is stored in massive tanks aboard a rocket. Here, marbles release their own kinetic energy as they bounce through Cascade Stilts.

Parts Needed

■ single-exit cubes



x8 yellow



x4 dark gray



x4 clear

■ double-exit cubes



x4 yellow

■ cascade stilts



x4

■ bottom-exit cubes



x4 yellow

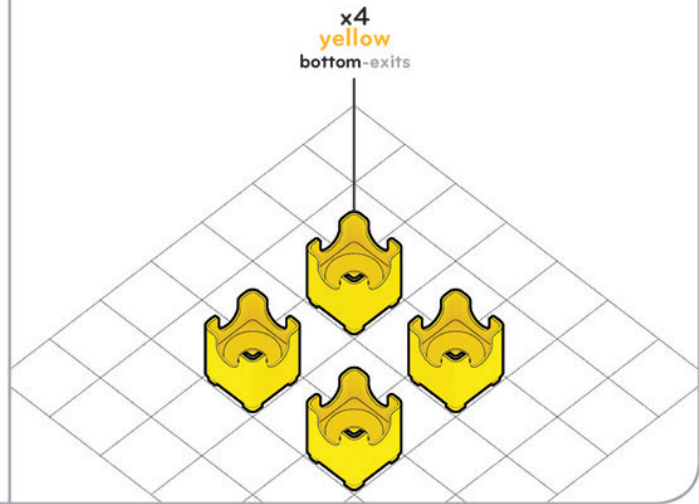
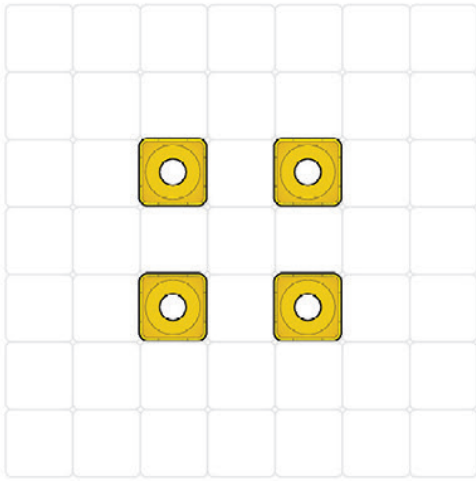
■ L-exit cubes



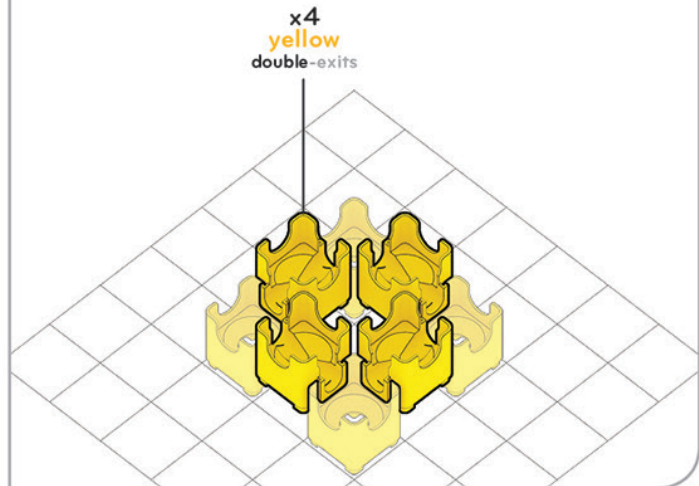
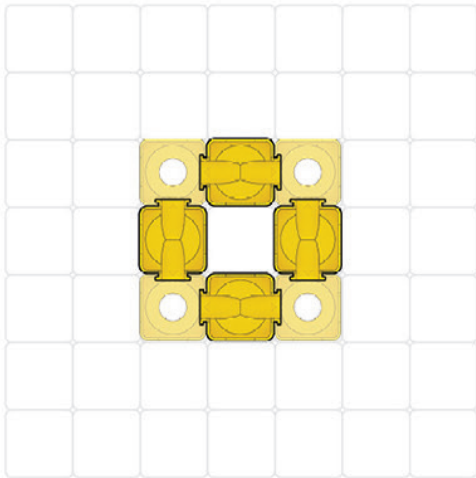
x4 dark gray



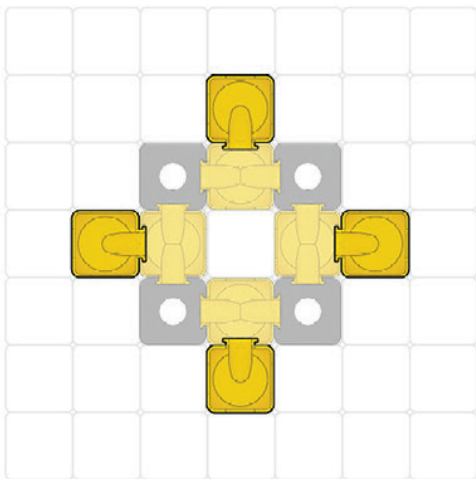
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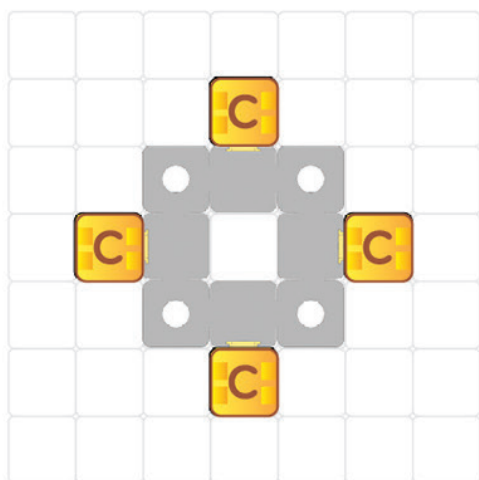
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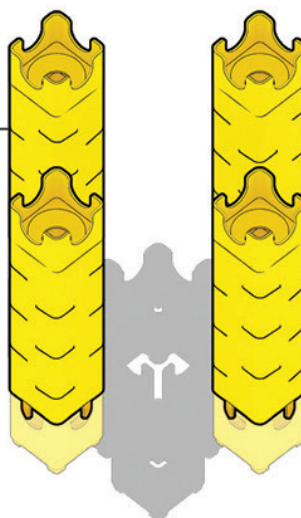
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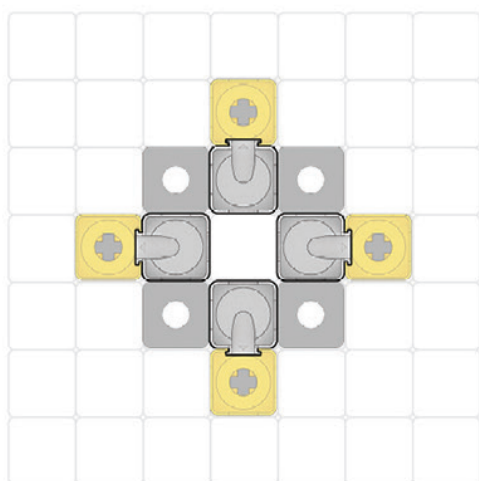
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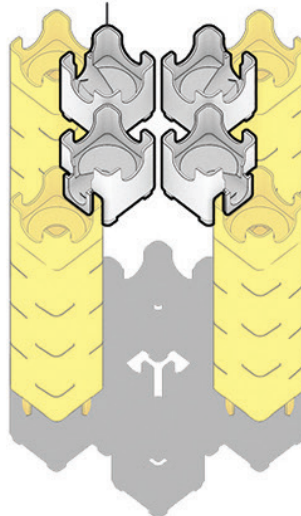
x4
yellow
cascade stilts



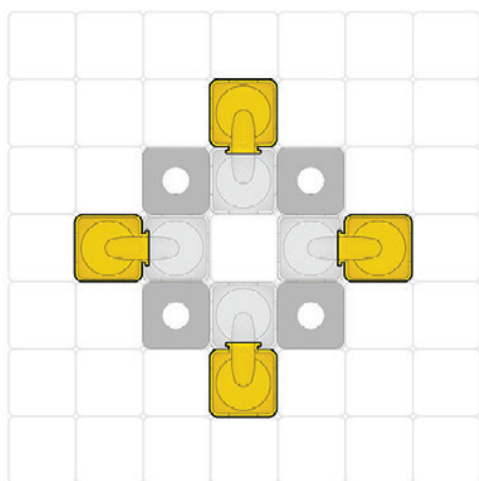
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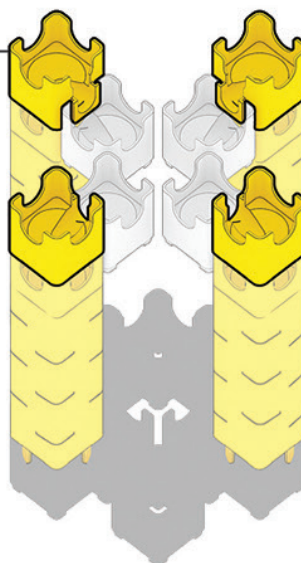
x4
clear
single-exits



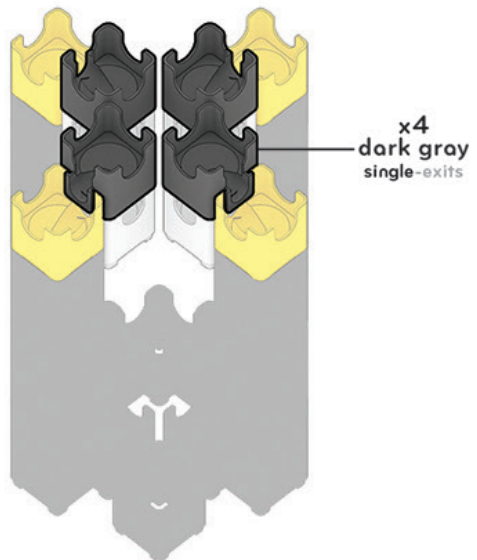
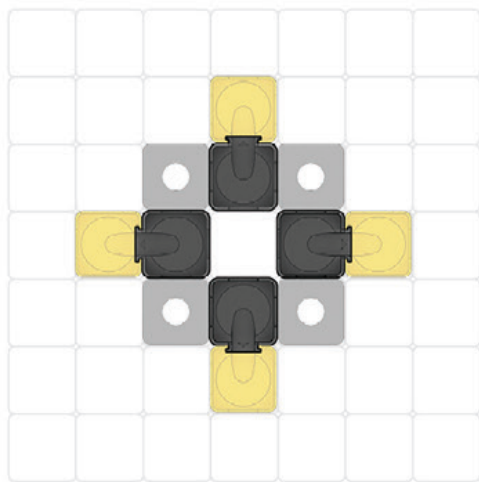
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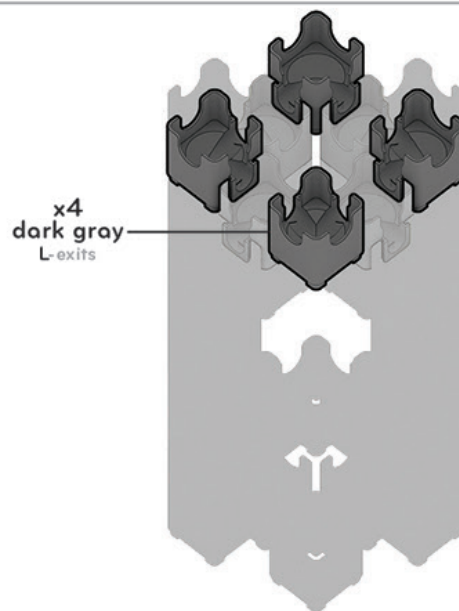
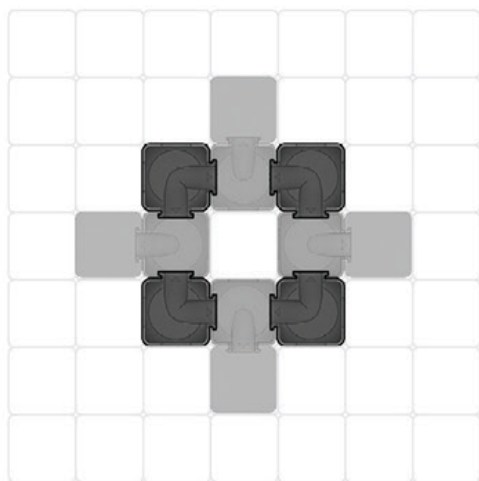
x4
yellow
single-exits



7



8



Set aside Fuel Tank Module for Rocket Assembly on pages 31 - 32

Oxygen Tank Module

Liquid oxygen is often used to activate rocket fuel. In the QBM-1 Rocket, marbles zip through Coaster Tubes like they are riding on air.

Parts Needed

■ single-exit cubes



x4 blue

■ double-exit cubes



x4 blue

■ bottom-exit cubes



x4 blue

■ L-exit cubes



x4 blue

■ quad-exit cubes

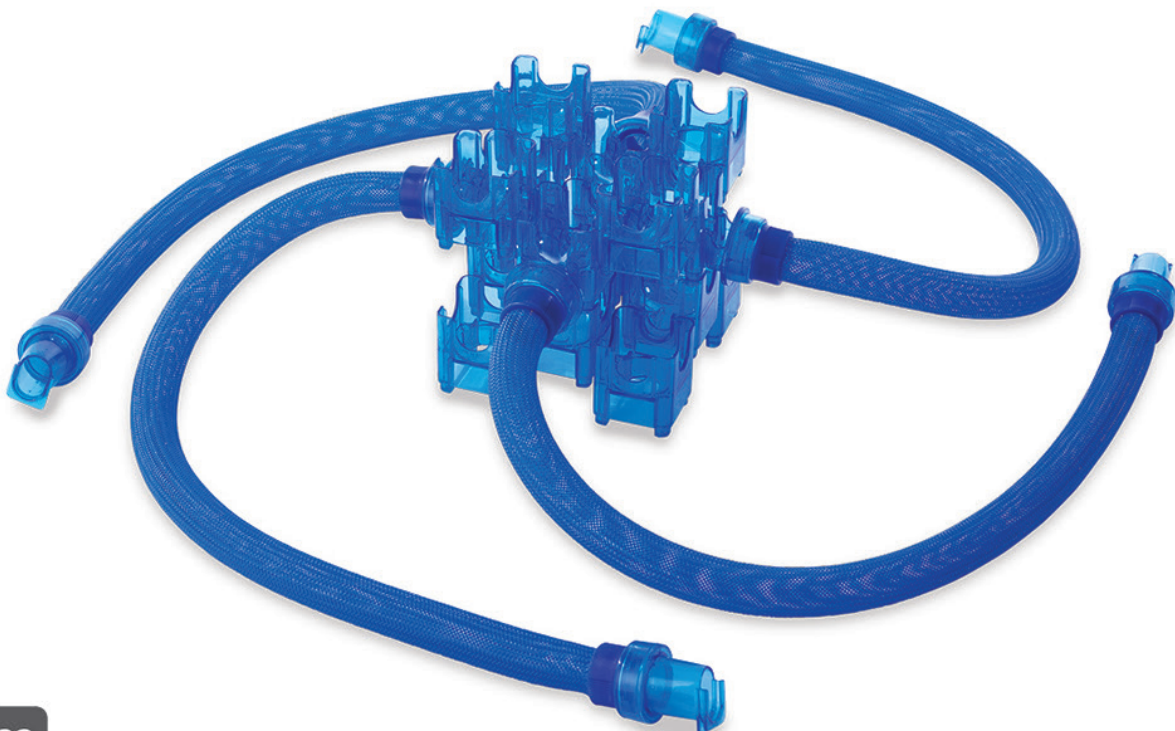


x1 blue

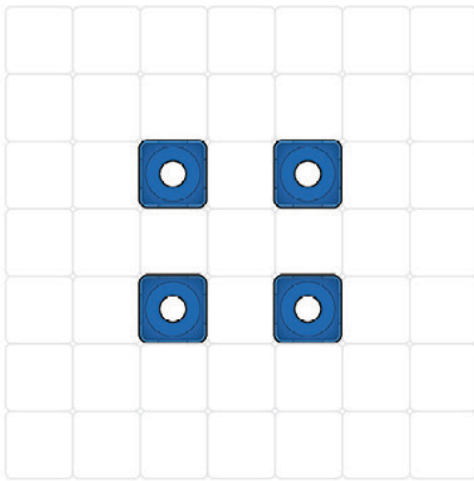
■ coaster tubes



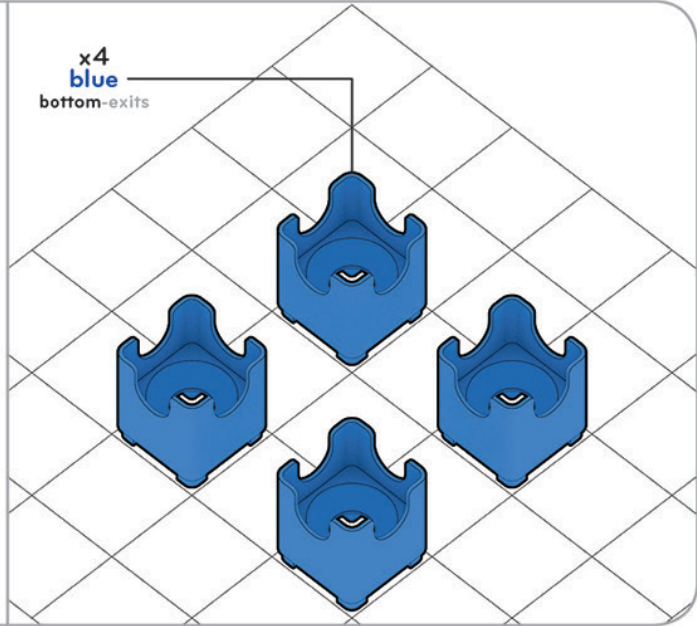
x4



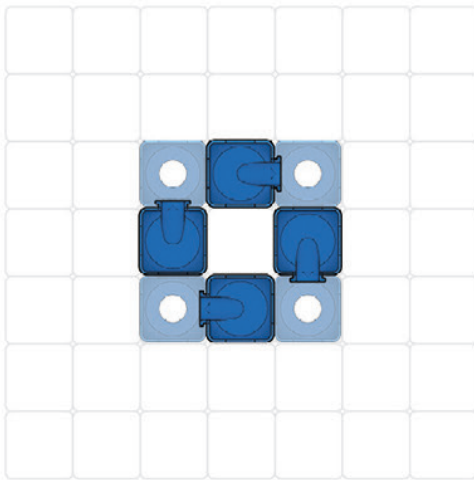
1



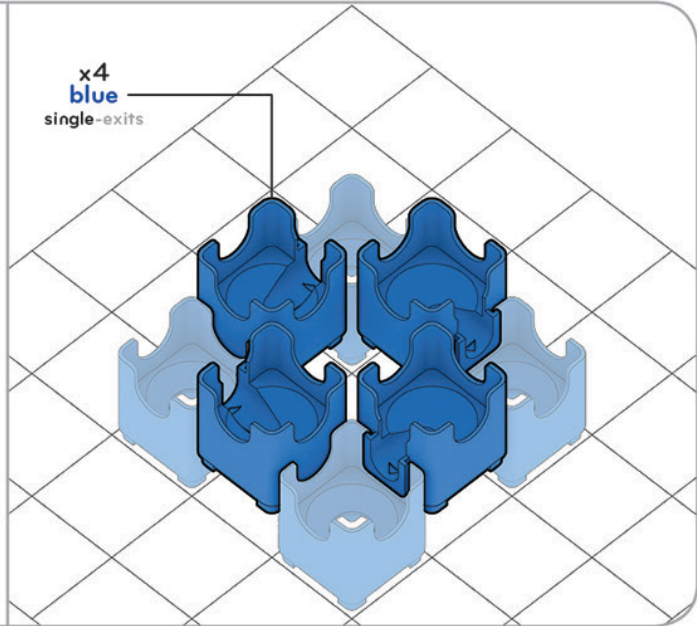
x4
blue
bottom-exits



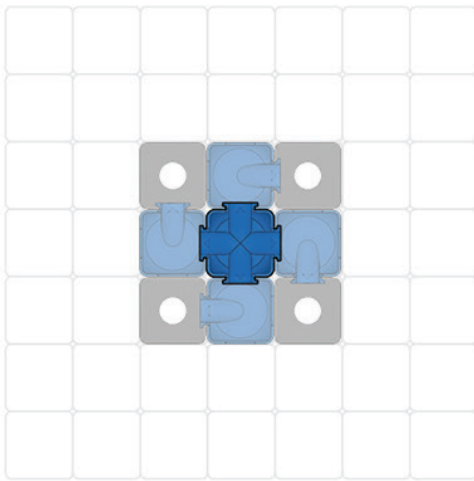
2



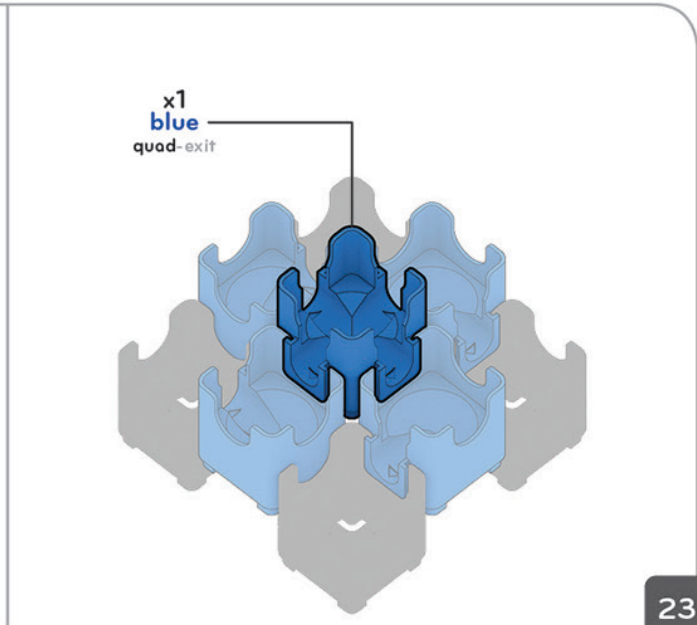
x4
blue
single-exits



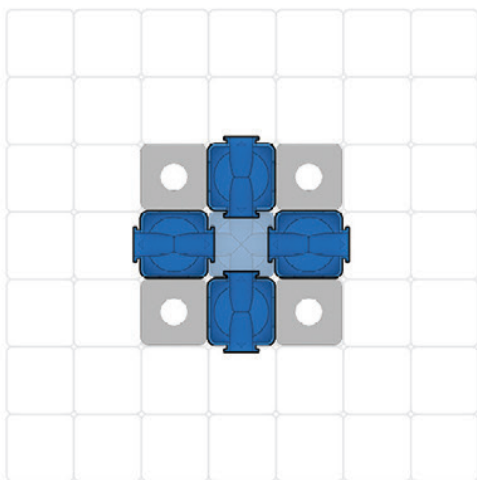
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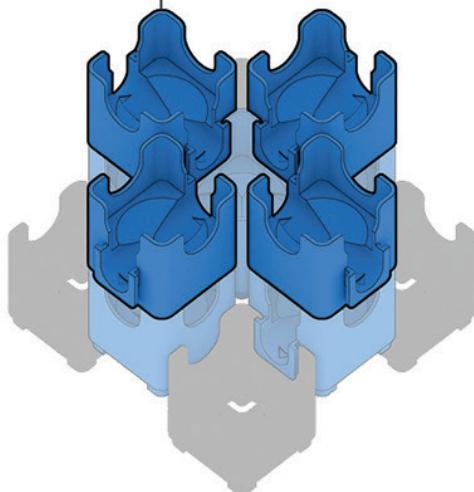
x1
blue
quad-exit



4

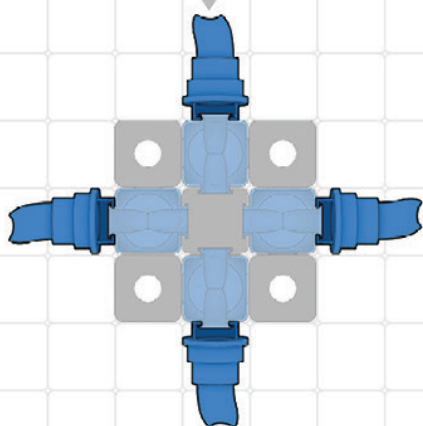


x4
blue
double-exits

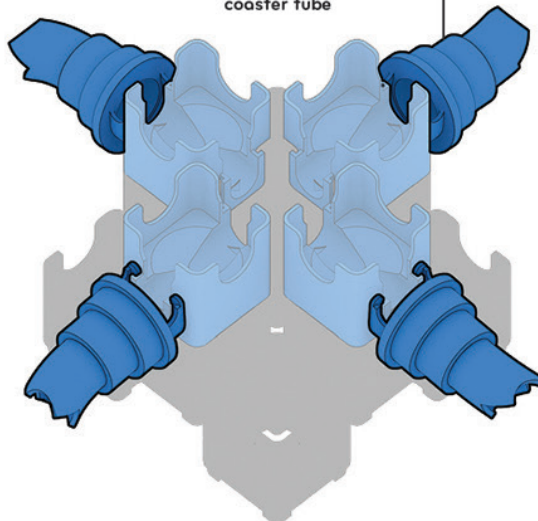


5

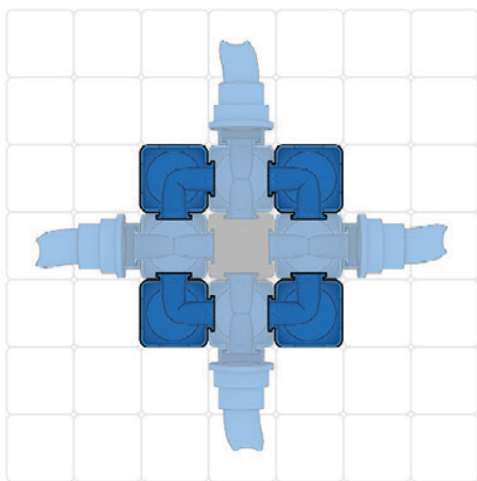
Other ends of tubes
connect on page 32



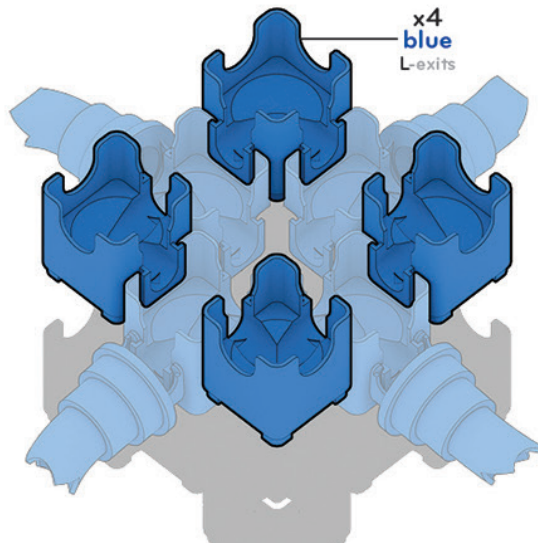
x4
blue
coaster tube



6



x4
blue
L-exits



Crew Capsule

While it can be a bumpy ride for astronauts inside a Crew Module, it's smooth sailing for marbles as they pass through the Spiral Sphere.

Parts Needed

■ single-exit cubes



x12 teal

■ double-exit cubes



x8 teal



x4 dark gray

■ bottom-exit cubes



x16 teal



x4 dark gray

■ L-exit cubes



x4 teal

■ quad-exit cubes



x2 teal

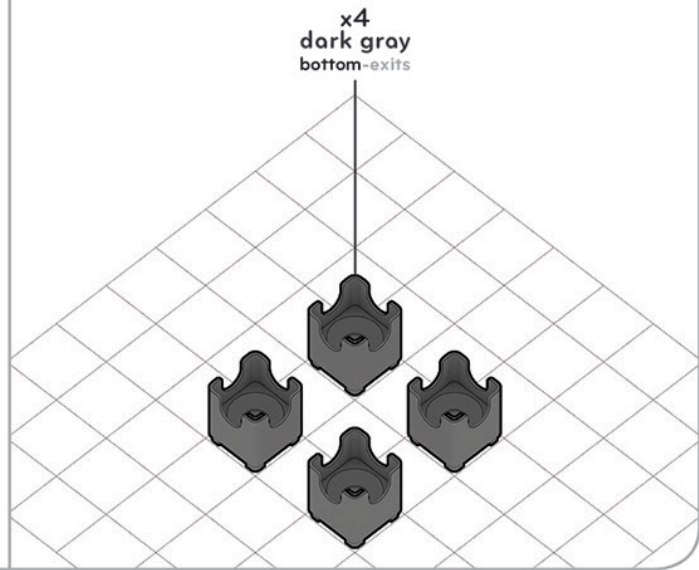
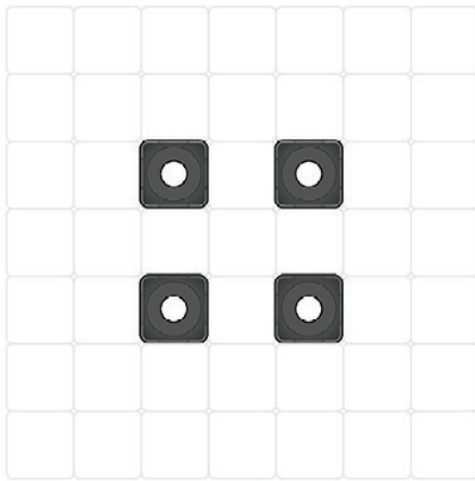
■ spiral sphere



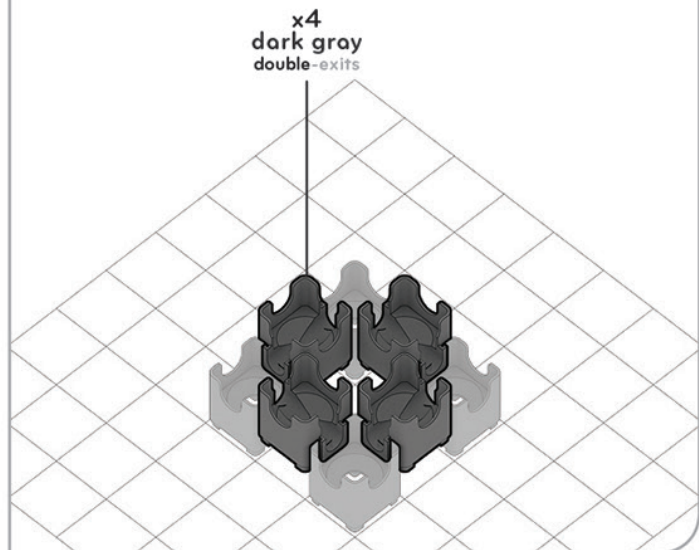
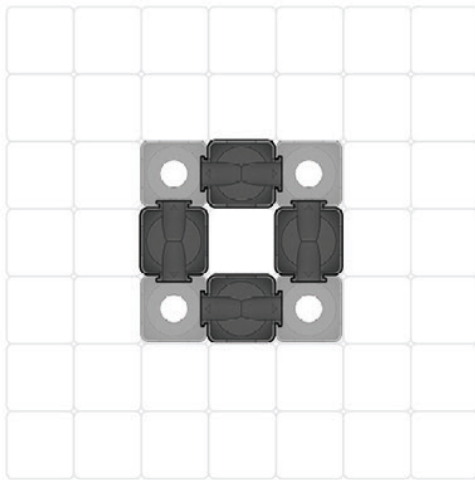
x1



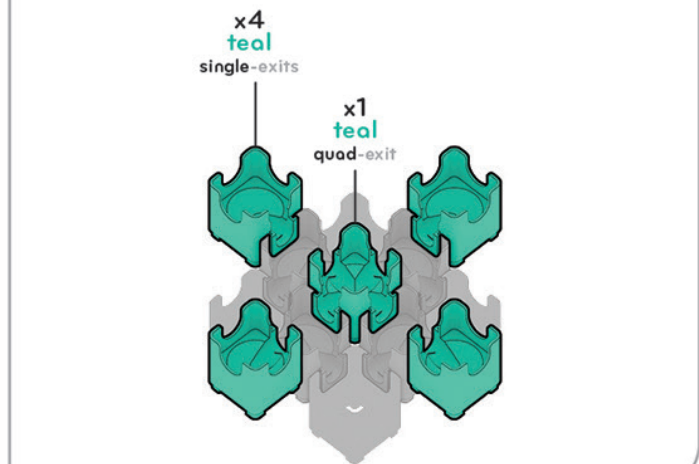
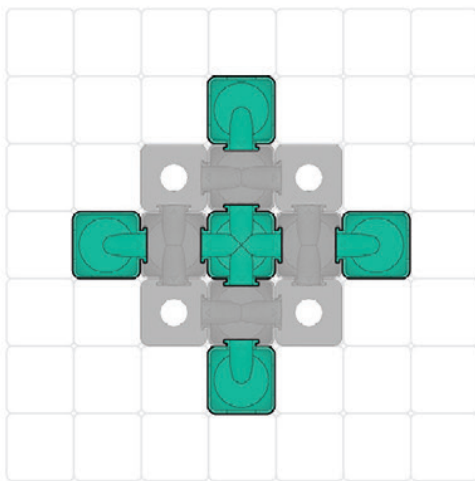
1



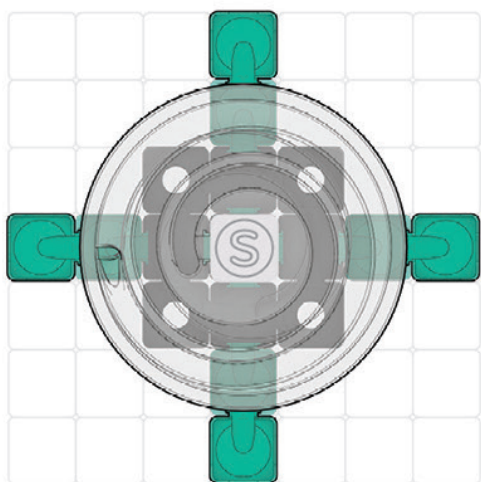
2



3

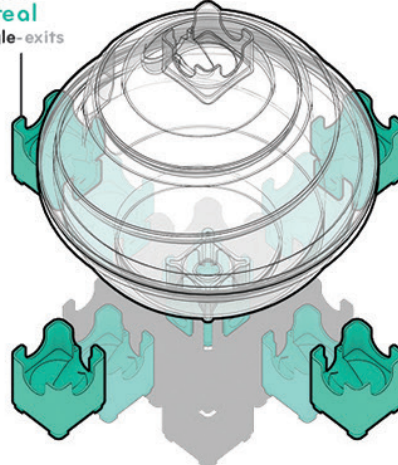


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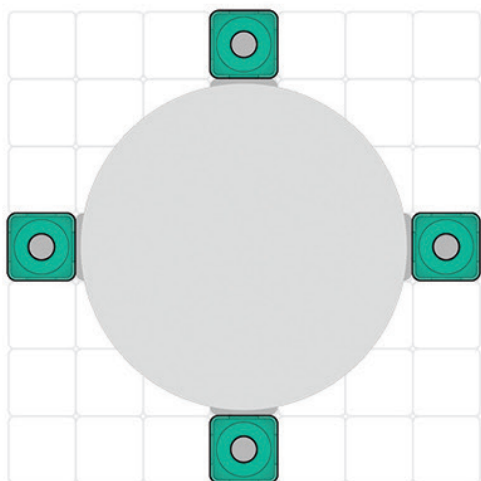


x1
spiral sphere

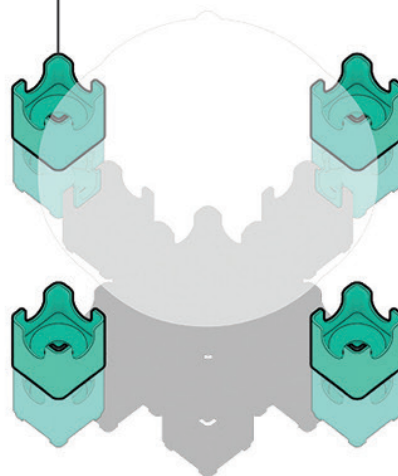
x4
teal
single-exits



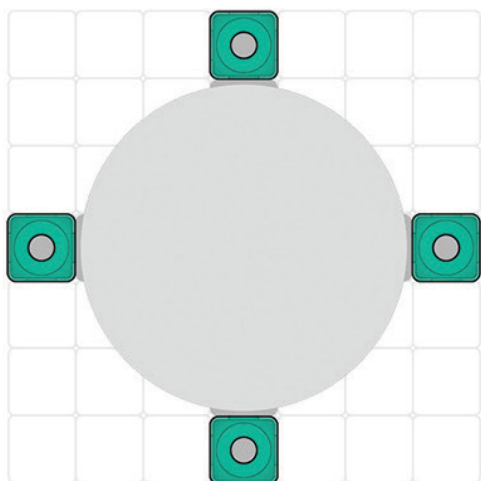
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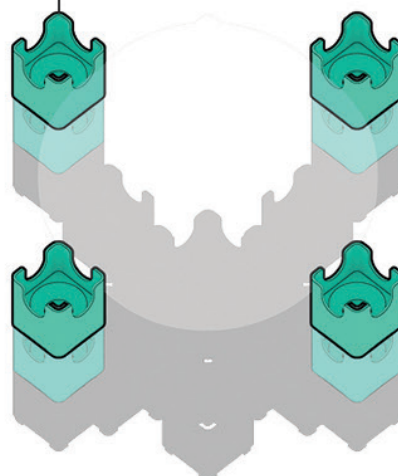
x4
teal
bottom-exits



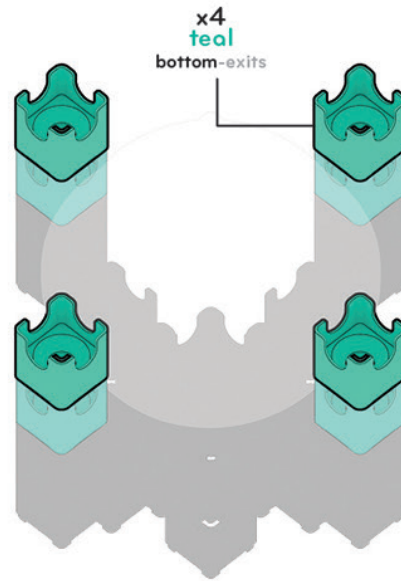
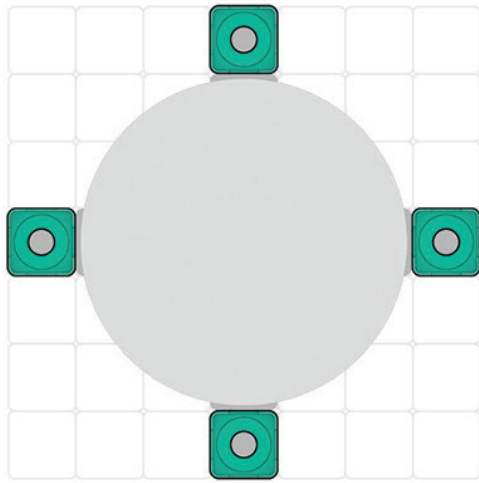
6



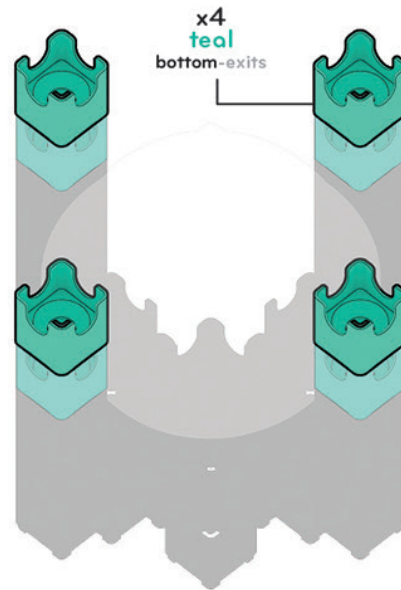
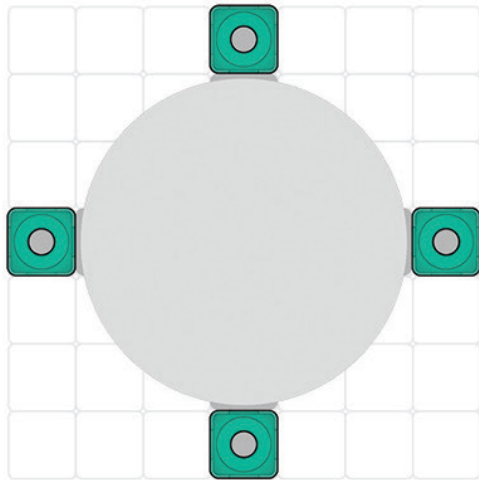
x4
teal
bottom-exits



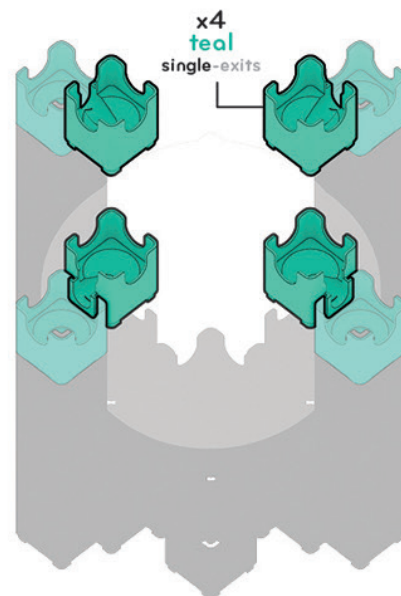
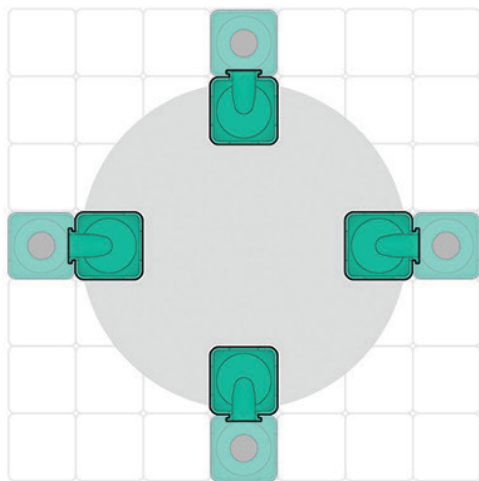
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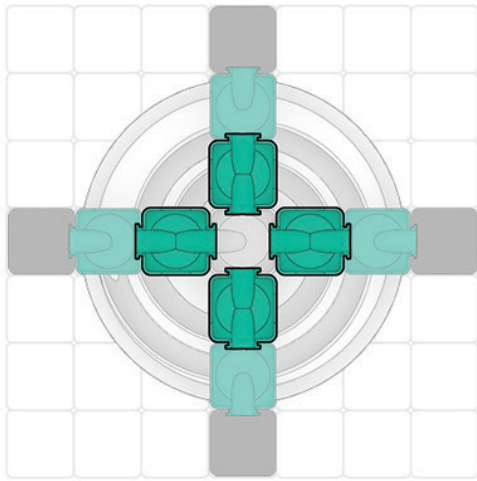
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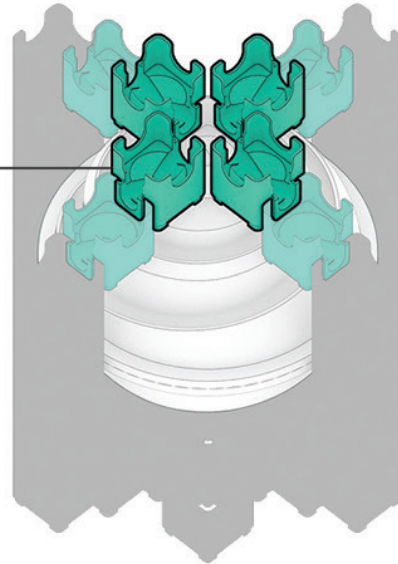
9



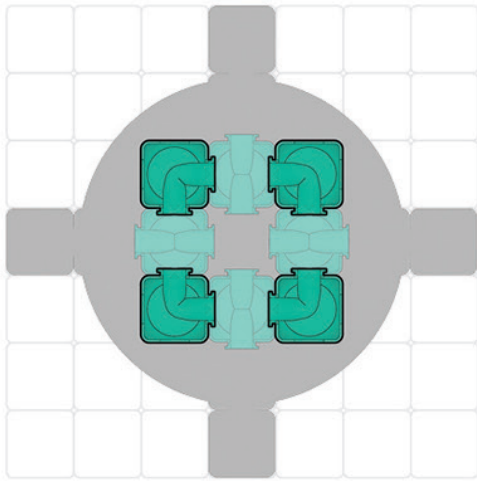
10



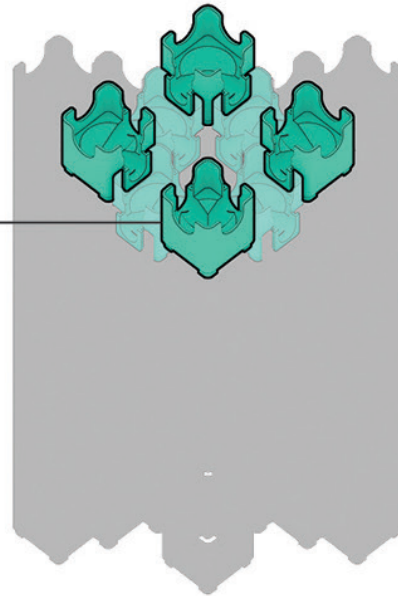
x4
teal
double-exits



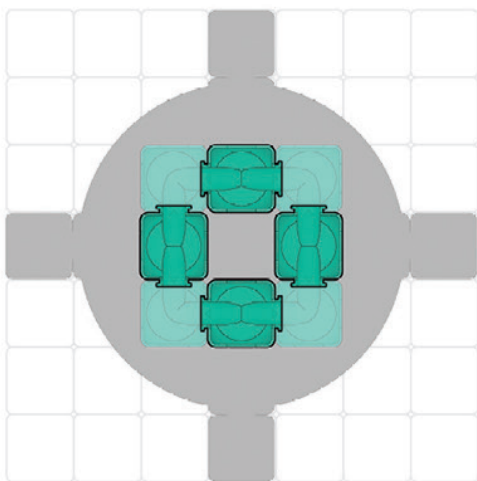
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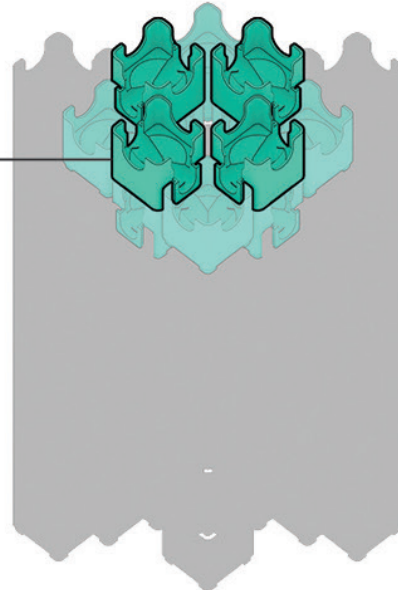
x4
teal
L-exits

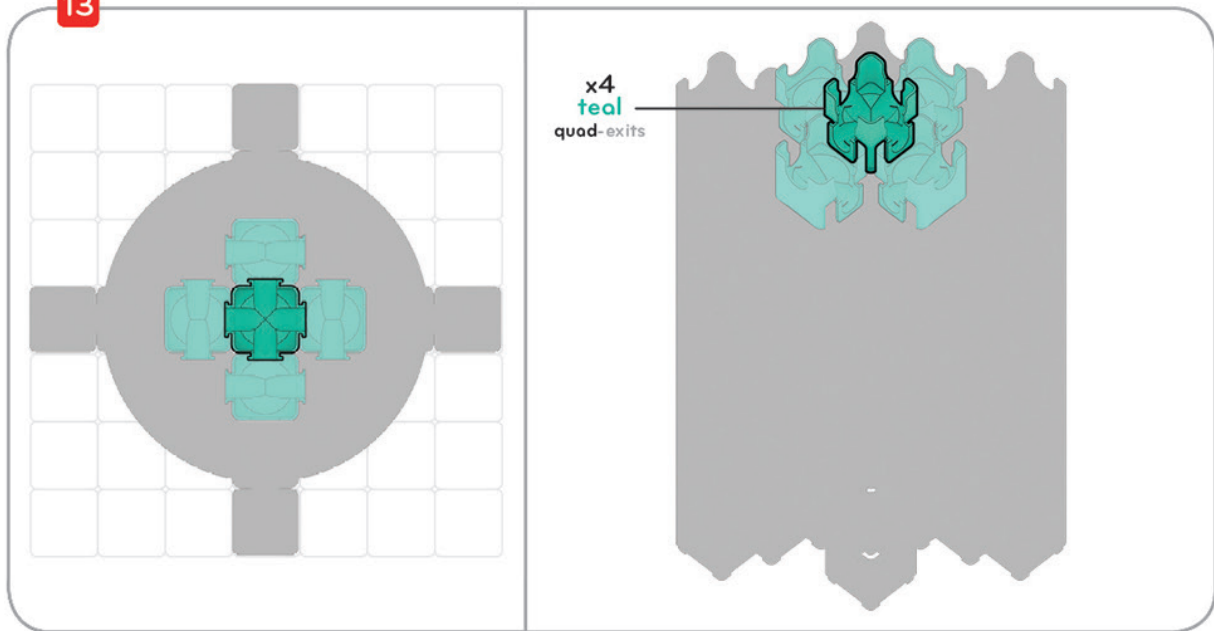


12



x4
teal
double-exits





Crew Capsule can be attached to either the QBM-1 Rocket on pages 31 - 32 or the Lander on page 35

Rocket Assembly

The rocket is assembled in sections from the bottom to the top.
Start with step **1** at the bottom of the page.

5

Attach the **Crew Capsule** to the top of the **Oxygen Tank Module**.

4

Attach the **Oxygen Tank Module** to the top of the **Fuel Tank Module**.

3

Attach the **Fuel Tank Module** to the top of the **Pump Module**.

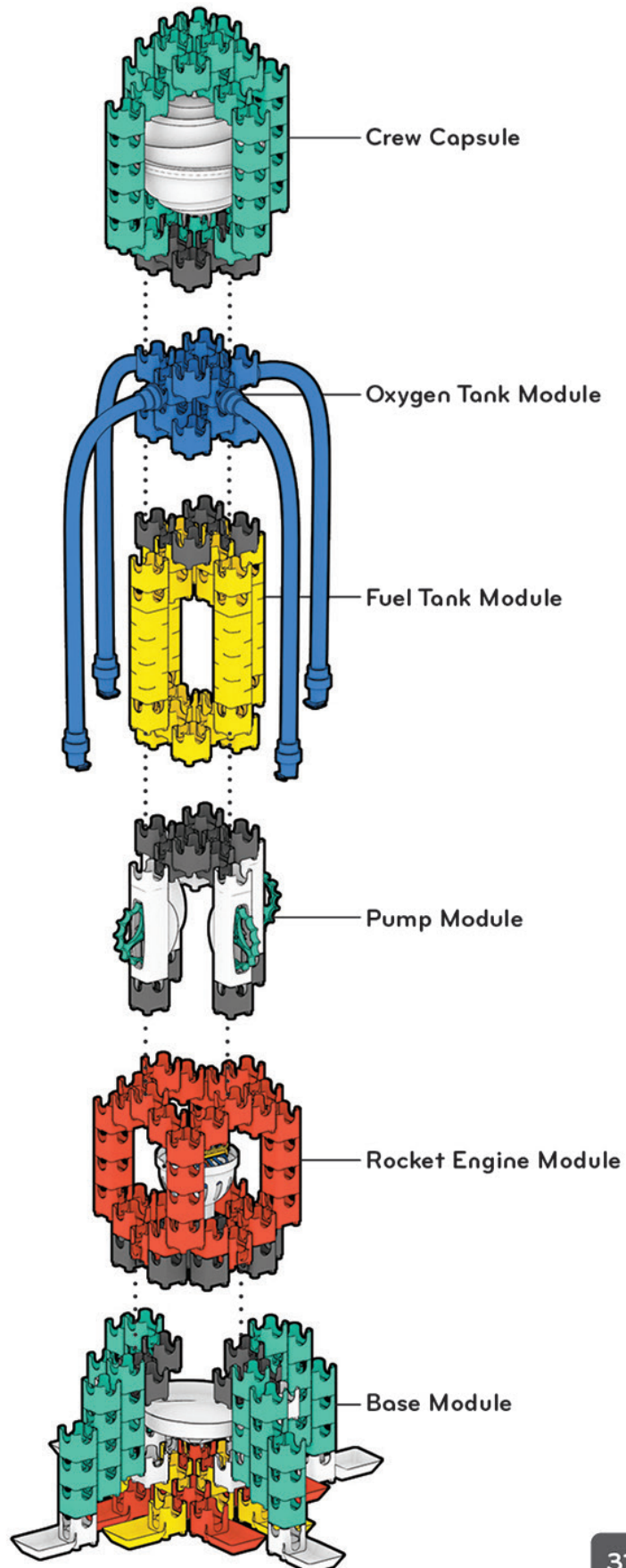
2

Attach the **Pump Module** to the top of the **Rocket Engine Module**.

1

Attach the **Rocket Engine Module** to the top of the **Base Module**.

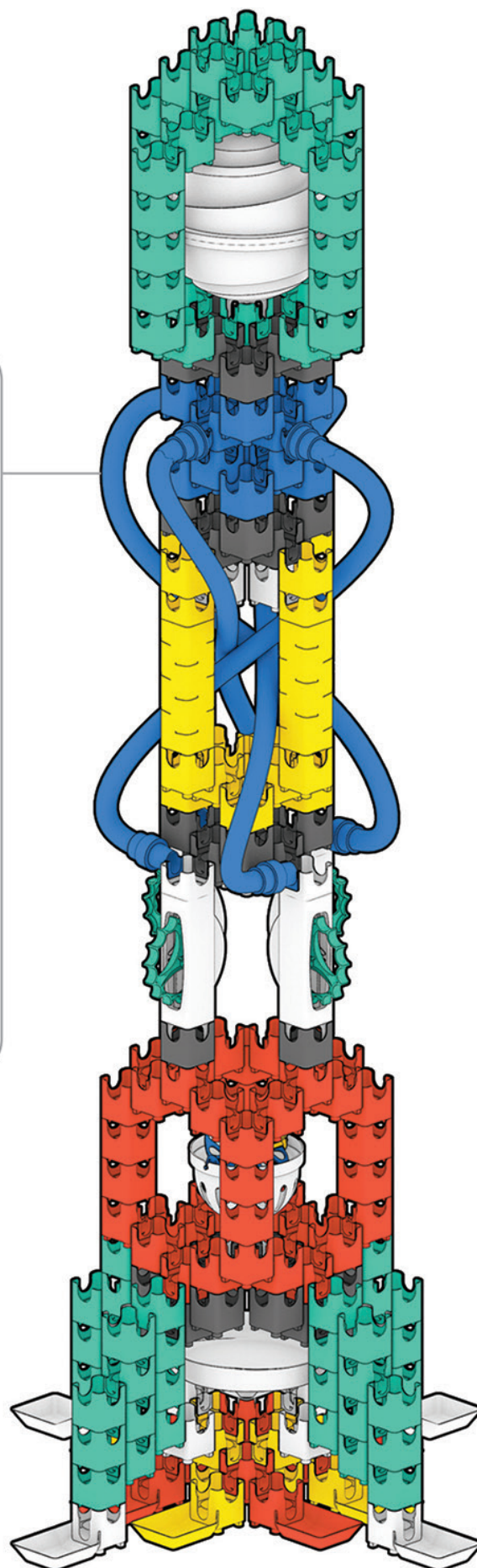
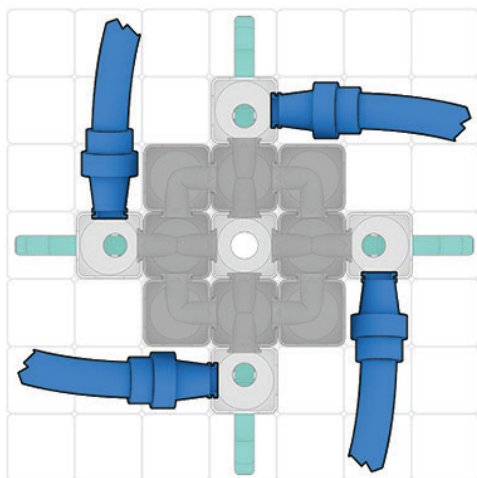
Note: There are many cubes that need to interlock in this step. Take care to ensure all parts are interconnected before proceeding to the next step.



6

Weave coaster tubes through the middle of the rocket.

Attach the coaster tube ends to the top of the speed sprockets on the Pump Module, as shown below.



Lander Module

A landing space craft is needed to get astronauts safely to the surface of the moon or another planet. The QBM-1 Rocket Lander Module uses marble catchers to make sure your marbles land safe and sound.

Parts Needed

■ single-exit cubes



x6 red



x4 dark gray

■ double-exit cubes



x2 dark gray



x2 red

■ L-exit cubes

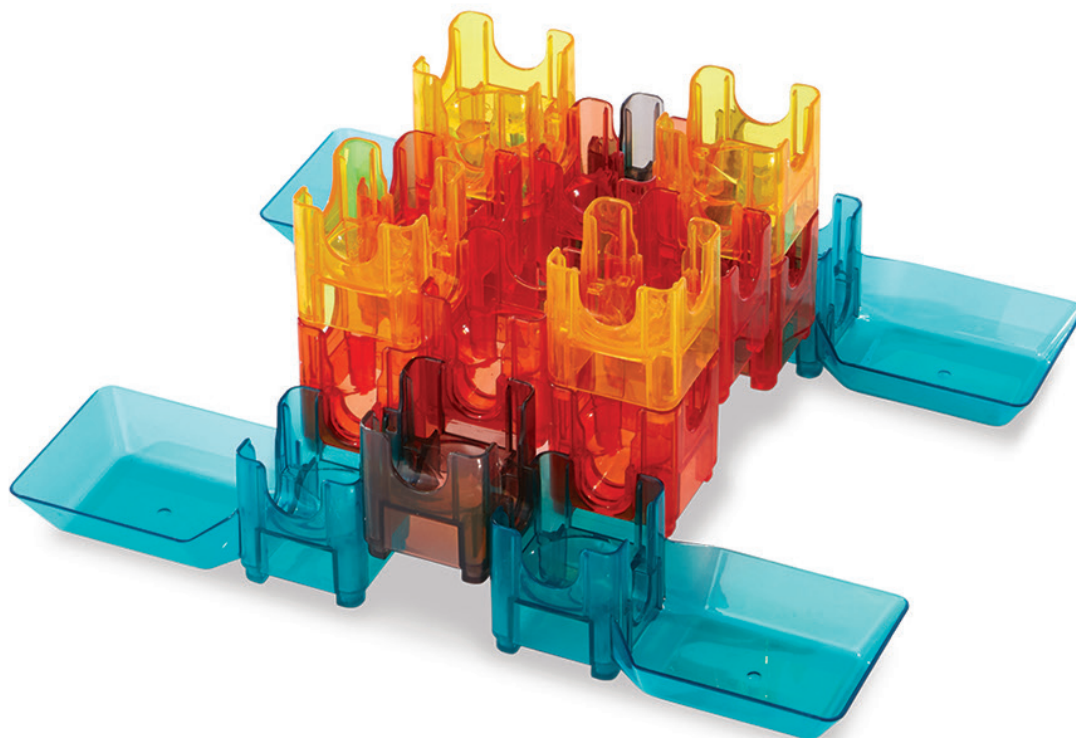


x4 yellow

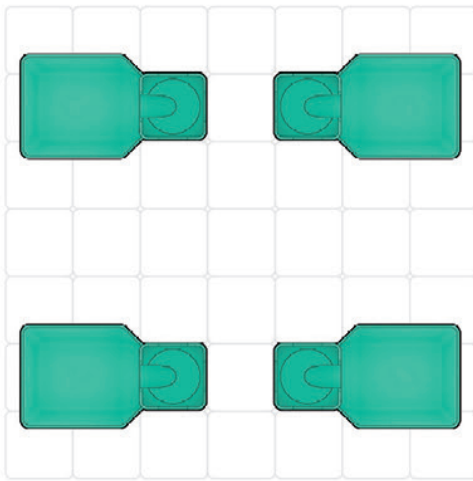
■ marble catchers



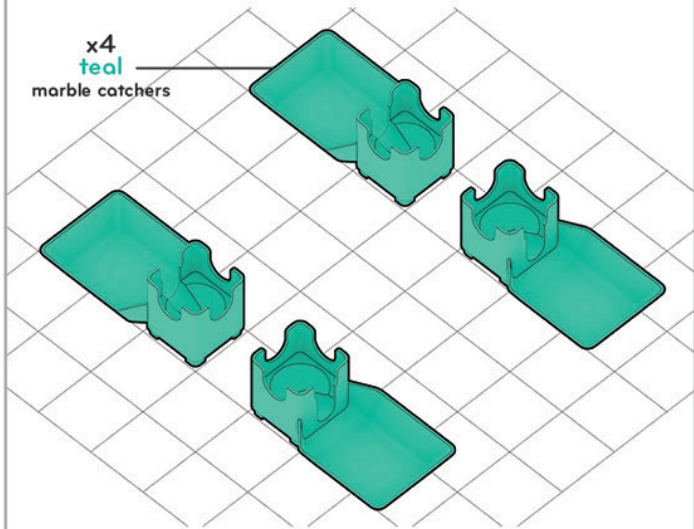
x4 teal



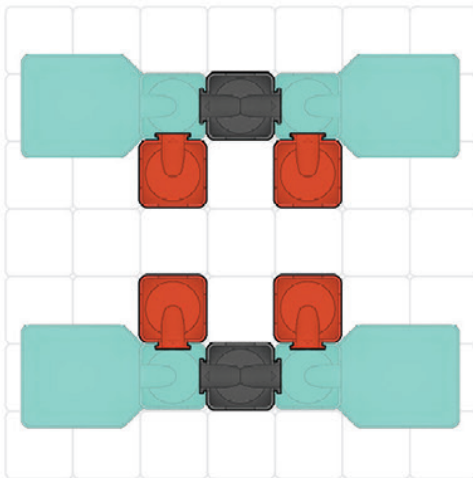
1



x4
teal
marble catchers

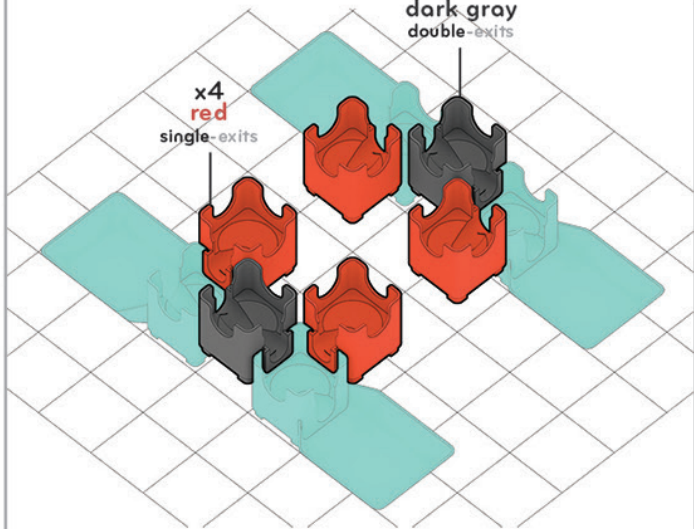


2

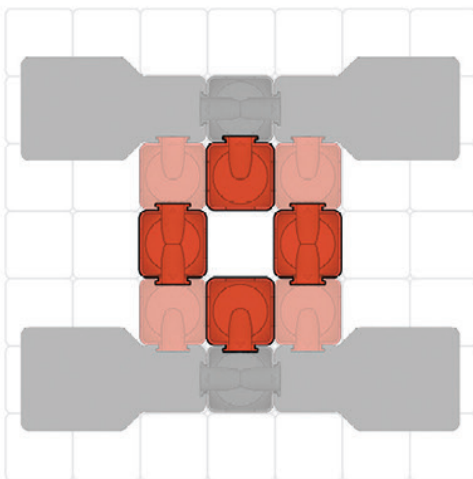


x4
red
single-exits

x2
dark gray
double-exits

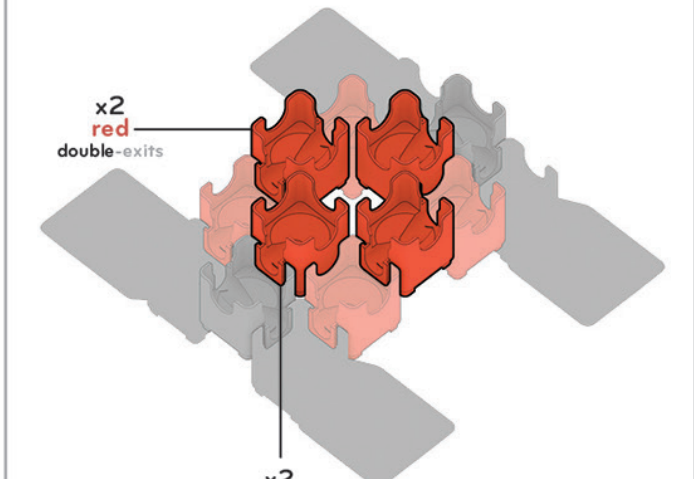


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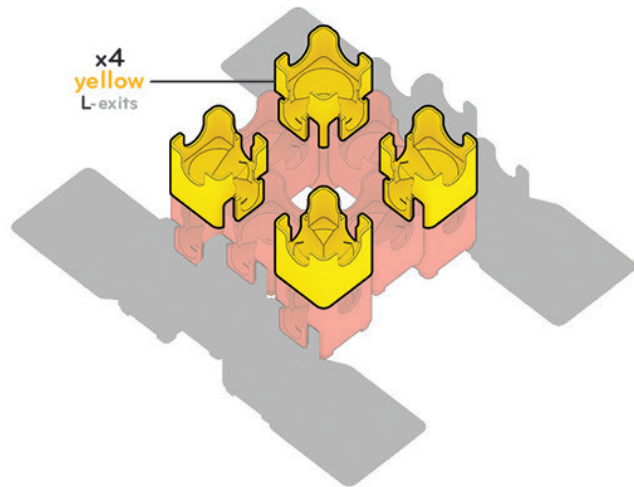
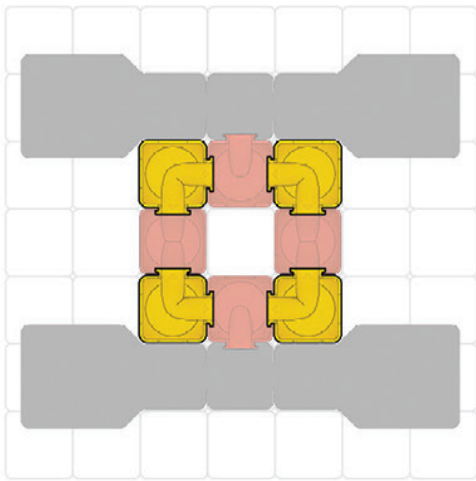


x2
red
double-exits

x2
red
single-exits

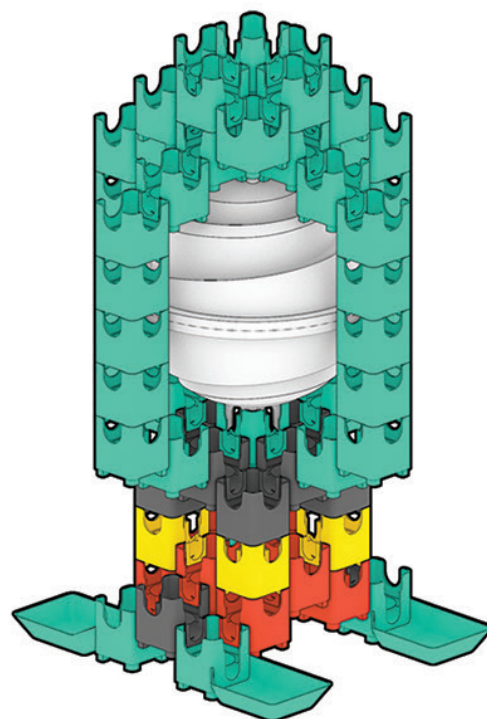
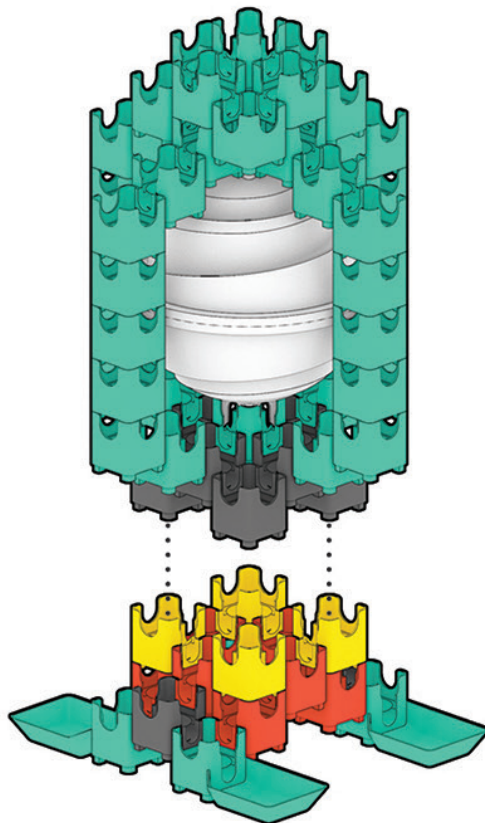


4



Lander Assembly

Attach the Crew Capsule to the Lander Module to create a landing ship.



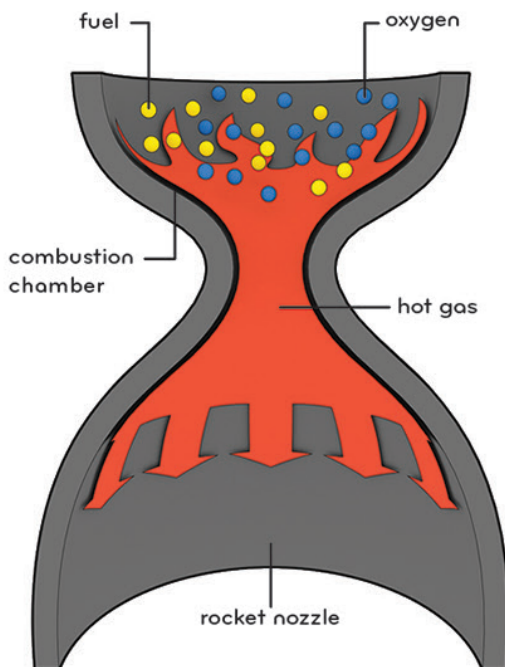
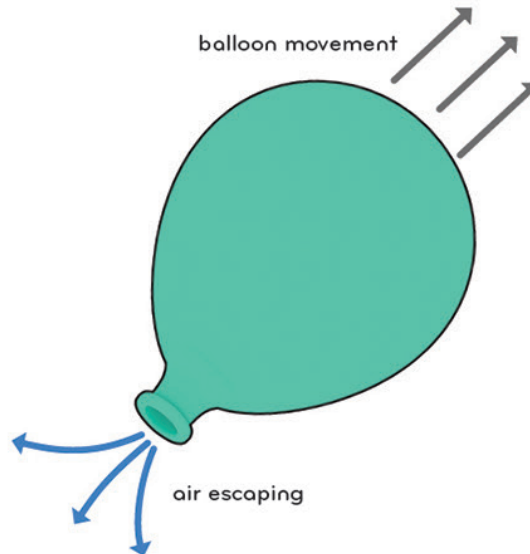
Understanding Rockets

History

The first rockets were used in the mid-1200s by the Chinese as fireworks. Rockets for space travel didn't occur until the mid-1900s. In 1961, a chimpanzee named Enos completed a successful space mission by orbiting the Earth aboard the Mercury Atlas 5. This paved the way for decades of manned space missions and today many countries use rockets to send people and machines into space.

How Rockets Work

Rockets work by creating and shooting hot gas downward towards earth, which causes the rocket to fly upwards in the opposite direction. A similar thing happens when a balloon is filled with air and let go. The air from the balloon goes one way and the balloon goes the other way. This movement is called thrust.



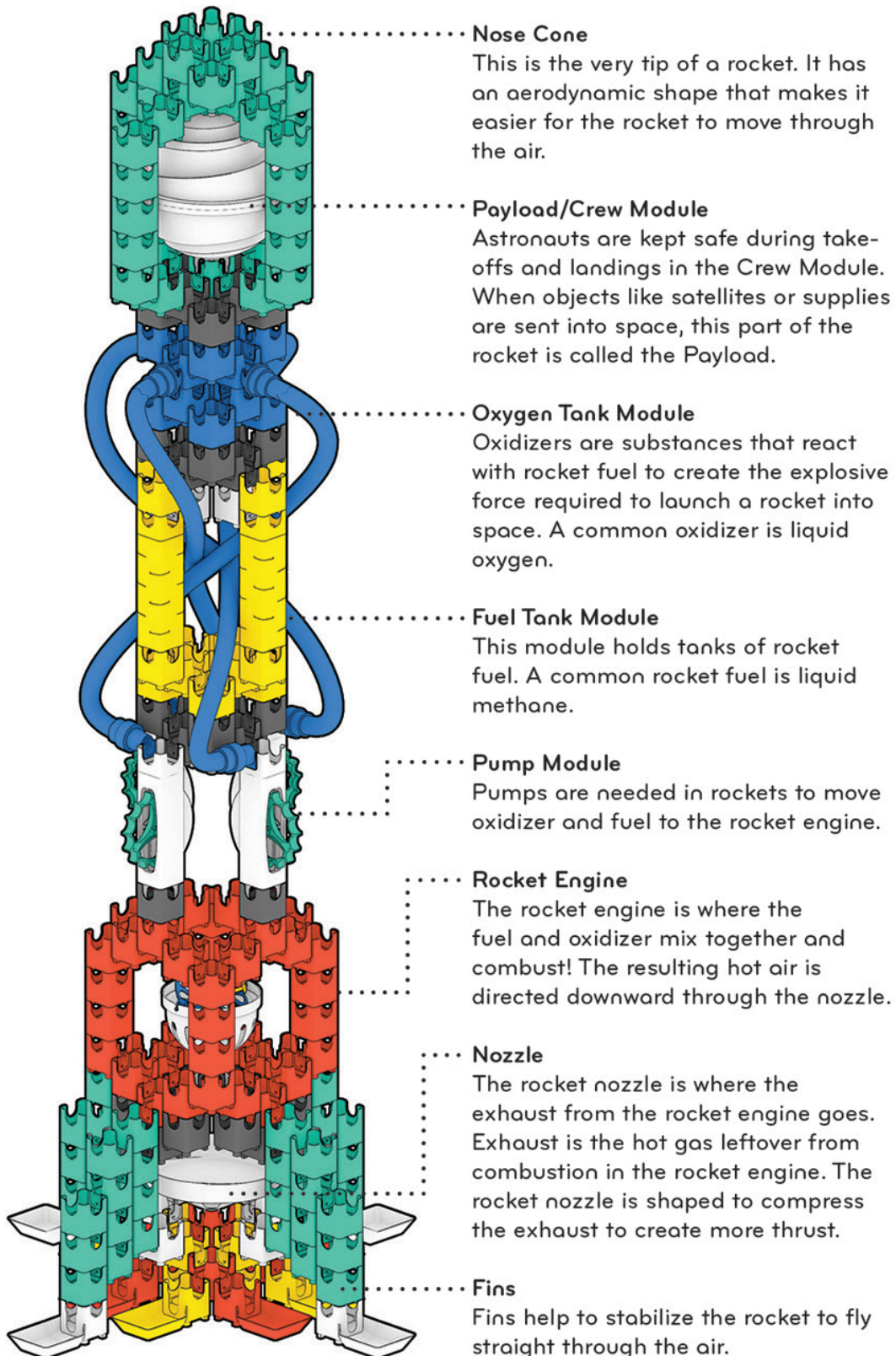
Rocket Power

Rockets are powered by combustion. Combustion is a chemical reaction between substances that results in the generation of hot gas. In the case of rockets, fuel and oxygen are the substances at work. The burning fuel is extremely hot and the temperature inside the combustion chamber is an incredible 5000 degrees Celsius or 9032 degrees Fahrenheit!

Overcoming Gravity

In order for a rocket to reach outer space, it must have enough thrust to escape earth's gravity. Gravity is the force that pulls objects toward the earth. In order for a rocket to reach space, it must travel at least 25,000 miles per hour!

Rocket Parts



Inspiration

Examples of other space-inspired objects you can create.



What will you make?

Find Q-BA-MAZE™ plans online

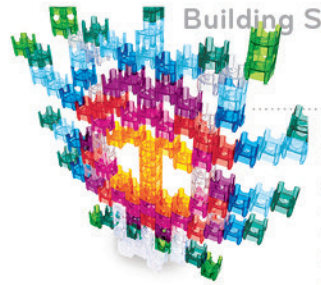
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Stunt Sets

- Mega Stunt Set
- Ultimate Stunt Set
- Starter Stunt Set
- Bounce Stunt Set
- Spin Stunt Set
- Zoom Stunt Set
- Cascading Marble Refill Set
- Spiral Sphere Set
- Action Stunt Set



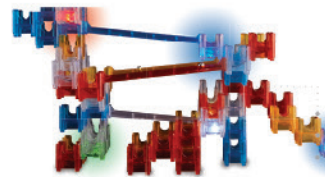
Building Sets

- Big Box Spectrum
- Big Box Bright Colors
- Big Box
- Starter Box Cool Colors
- Starter Box Warm Colors
- Bold Color Set



Rails Sets

- Rails Builder Set
- Rails Extreme Set
- Straight Away Rails Set



Lights Sets

- Mega Lights Set
- Deluxe Lights Set
- Starter Lights Set



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