

Basic Connector

Holds track pieces to the magnetic surface.

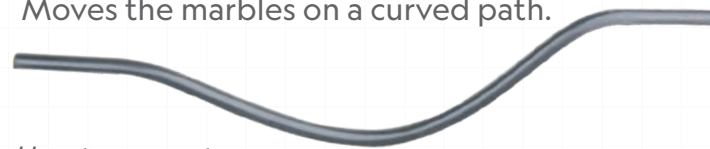
How to connect:



Curved Track

Moves the marbles on a curved path.

How to connect:



Straight Track

Moves the marbles in a straight line.

**TIP: Keep it straight!
Use minimal slope.**

How to connect:



Flex Track

Move the marbles on a path of your choice.

How to connect:



TIP: Use another basic connector in the middle to enforce the desired shape.



Stairs Track

Moves marbles down a flight of stairs.

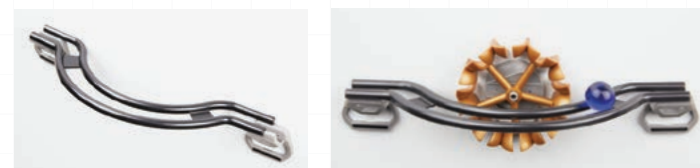
How to connect:



Around Track

Navigate your marble around obstacles.

How to connect:



How it works:



Edge

Catches a marble dropped from an upper level.

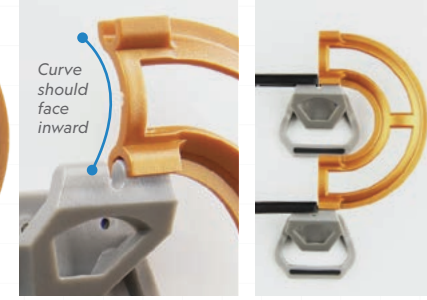
How to connect:



U-Turn

Directs the marble to a lower level.

How to connect:



TIP: Can face to the right or left



Catapult

Automatically launches marbles to the next piece.



How to reset:



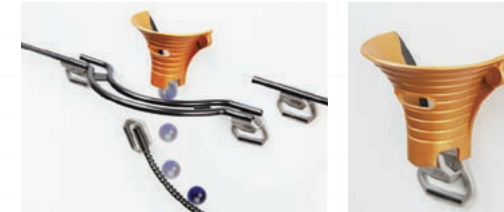
How to manually launch:



Funnel

Moves the marble to the next obstacle or ends a run.

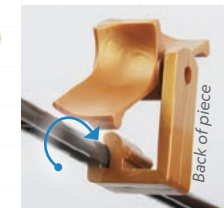
How it works:



Switch

Connect to a straight track and place below the funnel to alternate the marble between two paths.

How to connect:



How it works:



Hinge Connector

Holds the below trick pieces to the magnetic surface.

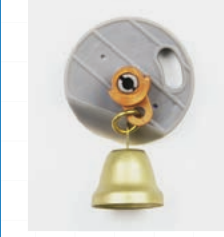
How to connect:



Bell

Ring the bell with your marble or other tricks.

How to connect:



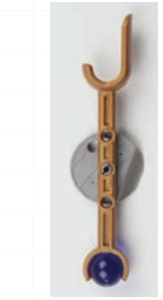
How it works:



Pole

Multi-use trick that moves marble from one level to another using another marble as counterweight.

How to connect:



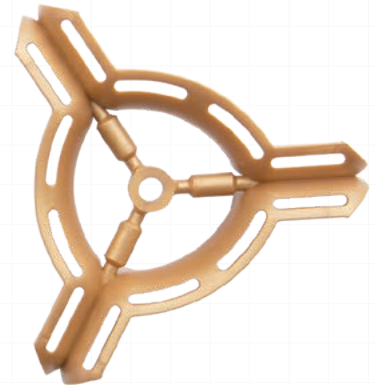
Spinner

Spins when hit by marble or can set another marble in motion.

How to connect:



How it works:



Spinner Pro

Moves marble from one level to another, set another marble in motion, or switch courses.

How to connect:



How it works:



WARNING: CHOKING HAZARD – This toy contains marbles. Not suitable for children under 3 years.

WARNING: This toy contains inaccessible magnets. Exposed magnets, if inhaled or swallowed can stick together or to other metal objects, and can cause serious or fatal injury. Keep away from electronic and medical devices.

Sharing Basic Connectors

Use a single basic connector to link two track pieces. Sharing the connectors will allow you to make more varied marble runs.

How to connect:



Flex Track around Spinners

Shape your flex track around a spinner trick piece to guide your marble around the Spinner or Spinner Pro.

How to connect:



U-Turn Chain

Link two or more U-Turn pieces together to create a zig-zagging transition to the next level.

How to connect:



How it works:



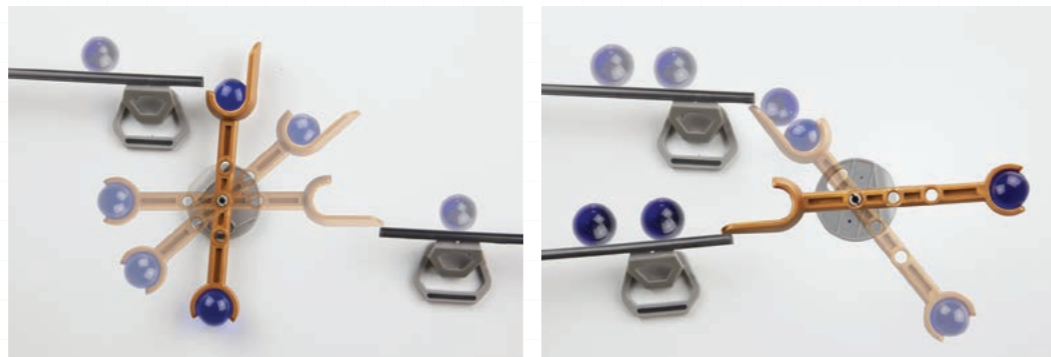
Pole

Connecting the hinge to one of the three holes in the pole will move the marble in a different arched path.

How Does the Pole Work?

When the hinge connector is inserted in the top hole, the pole will require more force from the oncoming marble to move in an arched path. That's because it must move the counterweight across a greater distance than when the hinge connector is placed in the other holes. When the hinge connector is placed in the center hole, the counterweight moves across a shorter distance and thus requires less force. When the connector is positioned in the bottom hole, it will travel an even shorter distance and require even less force. Experiment with these principles as you position your pole piece in your marble run.

How it works:



Think Like an Engineer

Engineers are planners and problem solvers. They work to figure out the best way to build all kinds of things we rely on every day. Mechanical engineers, for example, design things like engines, elevators, and the machines in factories. Civil engineers design roads, bridges, and airports. Electrical engineers design important components in everything from smartphones to satellites. All types of engineers use principles of physics (such as motion, force, gravity, and energy) in their work, just like you do when you build your marble run!



Eight Core Principles

#1

Know Your Parts

Part name, what it does, and how it's used

#2

Start at the Bottom

Start at the finish and build "up"

#3

Mind the Slope

Make sure your tracks aren't too steep

#4

Consider Transitions

Plan how the marbles move between levels

#5

Manage Height

Don't let the marble drop too far from one level to another

#6

Tweak It

Remember that small adjustments make a big impact

#7

Solve Problems

Notice specific areas that don't work and adjust

#8

Expand It

Identify ways to build wider and taller

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