Blue Marble NGMR150

National Geographic Marble Run with Motorized Elevator

Model: NGMR150 | Brand: Blue Marble

Introduction

The National Geographic Marble Run with Motorized Elevator is an engaging educational toy designed to introduce principles of physics and engineering through hands-on construction. This kit allows users to build intricate marble mazes featuring a unique motorized lift that creates continuous marble motion. This manual provides detailed instructions for assembly, operation, and care to ensure a rewarding experience.

Image: The product box for the National Geographic Motorized Marble Run, highlighting its 150 pieces and motorized spiral elevator feature.

Safety Information

WARNING: CHOKING HAZARD - Contains a Marble and Small Parts. Not for children under 3 years.
Adult supervision is recommended during assembly and play, especially for younger children, to ensure all small parts and marbles are handled appropriately.

What's in the Box

Verify that all components listed below are present in your kit:

- 106 Construction Pieces (various shapes and sizes for tracks and supports)
- 30 Marbles
- 14-Piece Motorized Spiral Lift (requires 3 AA batteries, not included)
- 1 Storage Bag
- 1 Learning Guide

Image: A visual representation of all components included in the 150-piece National Geographic Marble Run kit, detailing the quantity of each type of piece.

Setup Instructions

1. Battery Installation for Motorized Lift

1. Locate the battery compartment on the base of the motorized spiral lift.
2. Using a small Phillips head screwdriver, open the battery compartment cover.
3. Insert 3 new AA batteries (not included), ensuring correct polarity (+/-).
4. Replace the battery compartment cover and secure it with the screw.

2. Assembling the Motorized Spiral Lift

Carefully connect the 14 pieces of the spiral lift according to the diagrams in the included Learning Guide. Ensure all connections are secure to allow for smooth marble ascent.

Image: The motorized spiral lift in operation, showing marbles being carried upwards to a height of 19.5 inches, enabling continuous marble runs.

3. Connecting Construction Pieces

Begin by planning your marble run design. Connect the various track pieces, funnels, ramps, and support columns. The pieces are designed to fit together securely. Experiment with different configurations to create unique and stable mazes.

Image: A child observing a large, colorful marble run constructed with 150 pieces, demonstrating the potential for complex and engaging track designs.

Operating Instructions

Once your marble run is assembled, place the marbles at the starting point or into the motorized lift's intake. Turn on the motorized lift if you are using it for continuous play. Observe the marbles as they travel through the maze, demonstrating principles of gravity, momentum, and potential and kinetic energy.

Tips for Building

- **Stability:** Ensure all support columns are firmly connected to prevent the structure from collapsing.
- **Flow:** Test sections of your run as you build to ensure marbles flow smoothly without getting stuck. Adjust angles and connections as needed.
- **Creativity:** There is no single correct way to build. Experiment with different piece combinations to discover new pathways and challenges.
- **Expansion:** This kit is compatible with other National Geographic Glow-in-the-Dark Marble Run sets (non-magnetic), allowing for even larger and more complex creations.

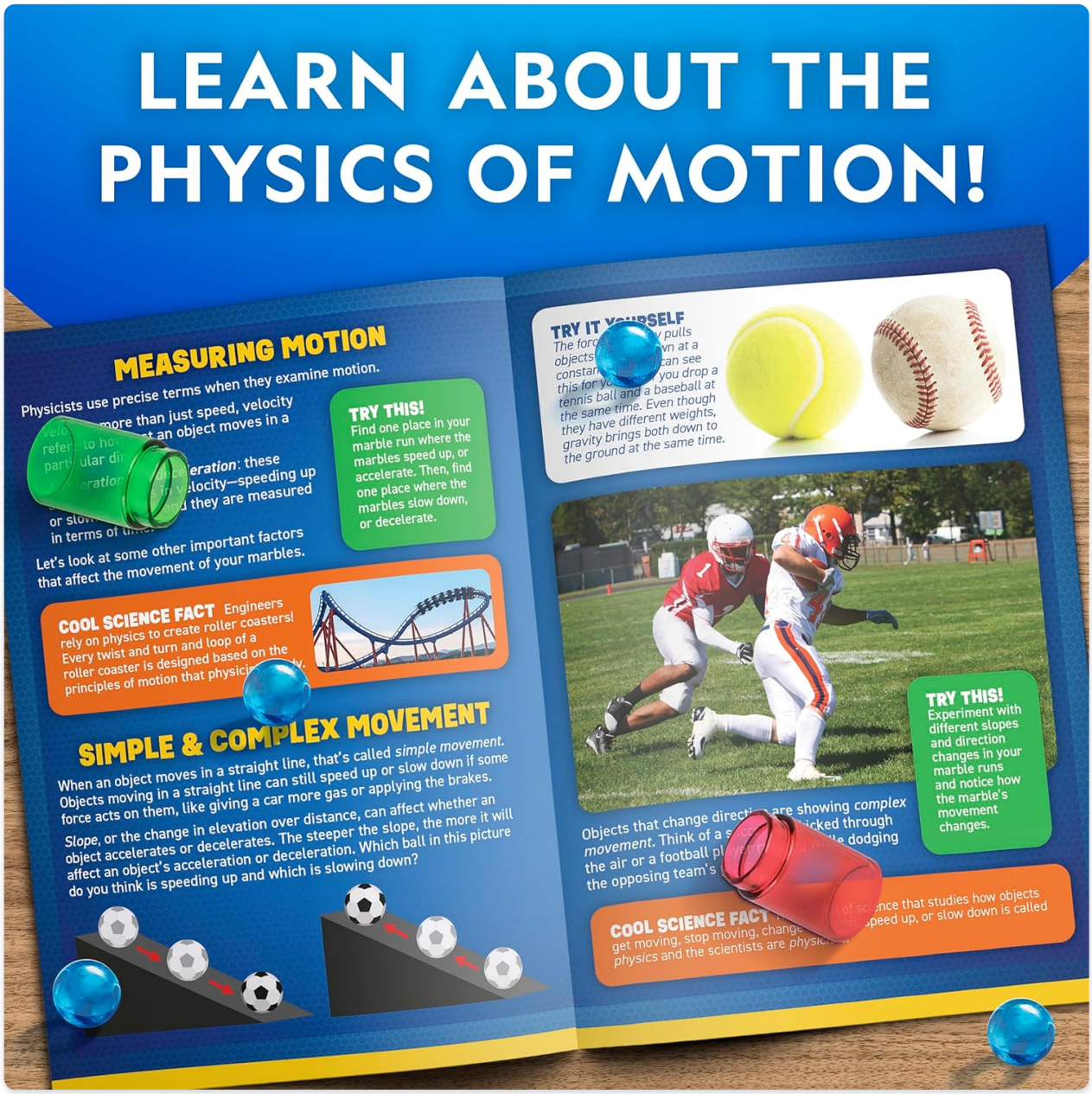

Image: An open page from the included Learning Guide, illustrating concepts of physics and motion related to marble runs, encouraging educational exploration.

Maintenance

Cleaning

To clean the marble run pieces, wipe them with a damp cloth. Do not submerge the motorized lift base in water. Avoid using harsh chemicals or abrasive cleaners, as these may damage the plastic.

Storage

When not in use, disassemble the marble run and store all pieces, including marbles, in the provided storage bag. This helps prevent loss of components and keeps the set organized.

Troubleshooting

- **Marbles getting stuck:**
  - Check all connections to ensure pieces are fully seated and aligned.

- Verify that no debris is obstructing the track.
- Re-evaluate the design for steepness or sharp turns that might impede marble flow.

- **Motorized lift not working:**
  - Ensure batteries are correctly installed and are not depleted. Replace if necessary.
  - Check that the spiral mechanism is clear of obstructions.
  - Confirm that the lift's components are assembled correctly and securely.
- **Structure is unstable:**
  - Add more support columns, especially under longer or higher sections of the track.
  - Ensure the base is on a flat, stable surface.

Specifications

Feature	Detail
Product Dimensions	14.76 x 4.49 x 12.01 inches
Item Weight	4.06 pounds
Model Number	NGMR150
Manufacturer Recommended Age	8 years and up
Release Date	February 21, 2024
Manufacturer	JMW Sales, Inc.

Warranty and Support

For any questions, concerns, or support regarding your National Geographic Marble Run, please contact the manufacturer, JMW Sales, Inc. Refer to the product packaging or the official Blue Marble website for specific contact information and warranty details. Please retain your proof of purchase for warranty claims.