

2020 3M Young Innovators Challenge



Slo-Mo Marble Challenge

Materials list 2020

Permitted materials

- ▶ K'Nex®- basic structural elements only (no marble track)
- ▶ Lego®
- ▶ Wood – including cocktail sticks, matchsticks, skewers, lollipop sticks, dowel or sheet
- ▶ Metal – including cans, foil, thin sheet, wire, springs
- ▶ Plastic – including bottles, straws, rod, sheet, film, foam, tubes, cord, packaging materials
- ▶ Paper or cardboard in any form
- ▶ Rubber or latex in any form
- ▶ Thin rope, string, wool or other thread
- ▶ Fastenings such as paper clips, staples, glue, tape, pins or other similar connecting materials
- ▶ Surface coatings/treatments
- ▶ Any decorative materials including, but not limited to, stickers, paint, pen, pencil, crayon, glitter and feathers

Excluded materials

- ▶ Purchased marble run parts, kits or elements

Dimensions

- ▶ The marble run must not extend beyond a plan area of 600 × 600mm at any point
- ▶ The marble must start its run no more than 700mm above the bottom of the marble run
- ▶ There is no restriction on the height of any decorative feature or framework
- ▶ The marble run must incorporate an area or container to catch the marble at the end of its run, which must be contained within the 600 × 600mm plan area
- ▶ The marble run must be clearly marked with a finishing line just before the catch/stop area
- ▶ The marble used for testing must be a standard glass marble of between 14–17mm diameter. Textured marbles are not permitted. No coatings, coverings or attachments may be made to the marble itself. The marble should be brought with the marble run to the judging session at 3M

Important: the marble run must incorporate a minimum of three different methods of slowing the marble's descent. Additional methods will score more marks.

