What are we looking at today?



Pattern seekind

Fair Testing

Identifying and Classifying

Observation over time

Research

STEM



Challenge:

Can you design and make a marble run?

You can build your marble run from almost anything:

- Cereal boxes
- Toilet rolls
- Lego
- The sky's the limit!
- A marble, ball or pompom

Challenges

Week: 1

STEM Challenge: Marble Run

Curious to find out more?

Try discussing these questions.

- what would happen if ...?
- Does the outcome change if I...?
- I wonder...?
- This reminds me of...



Aim:

The aim is for you to create a marble run (don't worry if it's not a marble. Anything that will roll, will work!)

You can be as creative as you like, you can have ramps, tunnels, slides or even bridges for your marble to run through. It can use gravity— for example, travel down a route or you can manoeuvre it with your hands.

Have fun!

Want to know the science?

How does it work?

The weight of the marble and the gradient of the slope (how steep it is), all have an impact on the energy your marble has. The more energy, the faster it will go.

Want to experiment?

Try making changes to your design . Using higher slopes or a heavier marble will increase the energy. What happens to the time it takes to complete the run if you make a change?

You could also think about the materials you use too. The rougher or stickier your surface (added friction) the slower your marble will travel.