

Session: Make it Move

This session explores the nature of moving vehicles, and the materials & technology required for them to function using our extensive toy collection. Concepts such as: gravity, friction, pushes & pulls, balance, spinning/centrifugal force will be explored along with Potential and Kinetic Energy. Electricity will also be introduced along with methods of generation. 'Make it Move Plus' option is available to extend your study to a full day with a trip on the Spa Valley Railway.

Session Breakdown:

- Introduction: What is a Museum & Moving Toys
- Gravity & Slopes
 - Uphill/downhill, rolling, weight
- Centrifugal Force
- Wheels
 - Pushing & Pulling
 - Friction
 - Trains & Moving Machines
 - Energy (Potential & Kinetic)
- Engines & how they work
- Travel on land vs in the air
- Gallery Activity
 - Trail or art activity
- Summery & Farewell

Duration: 1.5hrs (Museum), 1hr (Outreach)

'Plus' Option – An experience on a real working steam train can be arranged with Spa Valley Railway. Fees may apply according to our partner's policies.

Curriculum Links:

KS1, History – (1b)(2a,b)(4a,b)(5)

Science – Sc1: (2a,b) Sc3: (1a,b,c,d) Sc4: (2a,b,c)

Artefacts Used:

- Hoop & Skimmer
- Metal Elephant Toy (c 1850)
- Functioning toy train
- Toy horse cart
- 'Fivestones' or 'Colours' Game
- Spinning Top
- Pull-back plane
- Toy Helicopter
- Toy Car