Station 1 Gravity -Freefalling Water

In this experiment students observe what happens to a stream of water when the container falls at the same rate as the water inside it.

Materials:

* Bottle or cup with holes pierced in the sides near the bottom
* Water
* *Optional* – foam mat to drop bottle or cup onto to avoid breakage and noise

Station 2 Magnetism –Opposites Attract

In this experiment students observe magnets attracting and repelling.

Materials:

* Bar magnets with poles marked
* “Race track”
* *Optional* – various types of magnets for further experimentation

Station 3 Centripetal Force –Upside Down

In this experiment students observe that the water stays in the upside down bucket.

Materials:

* Bucket
* Water
* *Optional* – balloon with coin inside

Station 4 Friction –Coming to a Stop

In this experiment students observe the effect of different surfaces.

Materials:

* Toy car
* Different surfaces for the car to roll along
* Tape measure or metre ruler

Station 5 Direct Force –Things that go bump

In this experiment students observe the effect of the mass of the ball on the force.

Materials:

* different sized balls (that have different masses)
* Tape measure or metre ruler

Station 6 Buoyancy –Whatever floats your boat

In this experiment students observe how the shape of an object affects its buoyancy.

Materials:

* Chip packet or plastic bag
* 100 small objects (e.g. coins) or rice
* a plastic lid or cardboard circle
* A bucket
* water

Station 7 Air –Marshmallow Shooters

In this experiment students experiment with air moving things.

Materials:

* marshmallows
* cardboard tube (with same diameter as marshmallows)
* cornflour