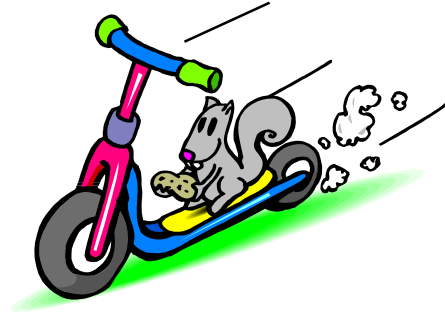




## Push it and pull it - KS2 Challenge Sheet

Making things move. Anything we do to make things move is either a push or a pull. Let's explore some of these forces - magnetism, friction, weight and air resistance. Use force meters to measure forces.



### **Educational objective**

To provide experiences of a range of forces.

### **Approach**

Whole class introduction - what is a force? Whole group discussion using examples of magnetism, weight(gravity), friction, air resistance. Practical group activities with the children working in pairs, to make a K'NEX vehicle and make it move in different ways without touching it (eg magnets, wind, gravity). Use a force meter to measure forces and make a force meter (upper KS2) and use it to measure friction/weight.

### **Specific skills to be developed**

Science AT4 forces

### **Cross-curricular links**

Science and maths

### **Ideas for extension activities**

Investigations involving forces eg brick(friction), parachutes(air resistance), strength of magnets

### **Equipment we will provide:**

boxes of K'NEX

K'NEX wheels

magnets

string

aquarium

forcemeters

### **Subject skills / Desirable outcomes**

Forces and motion

Experimental & investigative science

Shape, space & measure

### **Life skills**

Innovation skills

Problem-solving skills

Team working skills

Communication skills

A 'can-do' approach