

About the Activity

Using a range of activities children will gain an understanding of how some everyday forces work. With reference to historical examples children will predict the effect a force will have on a model they have designed themselves. They will record results and then adapt their model design so that it goes higher, faster or further.

Activity Aims

The aim of this activity is to:

- Make predictions.
- Allow participants to see how forces work in real life.
- Make a model device that can overcome a force to produce the desired reaction.

Learning Outcomes

Upon completion of the activity, participants will have:

- Predicted the outcome of given tasks.
- Designed and built their own model.
- Conducted an investigation and recorded results.
- Adapted their model design and, taking into account their results, improved its ability to overcome a force.

Progression Opportunities

Some participants may also:

- Independently predict the outcomes of modifications to the model.
- Independently predict and draw conclusions from results.
- Progress to identifying further tests to substantiate results.
- Be able to understand the history of the invention of some technologies.

In addition, participants should also have developed in the following:

- Interpersonal Communication
- Teamwork

Associated Vocabulary:

Words relevant to safety e.g. boundaries, hazards, risk assessment, rules.

Words relating to practical investigation e.g. conclusion, plan, result, design, equipment, safety, fair test.

General vocabulary e.g. teamwork, history, knowledge, detail.