

Activity: Will it fly?

National Curriculum Links:

Working scientifically

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- identifying scientific evidence that has been used to support or refute ideas or arguments.

Forces

- identify the effects of air resistance, water resistance and friction, that act between moving surfaces

Suggested Park location: The Peace Pagoda

What do we need?

Example helicopter templates (see below)

Paperclips

Scissors

Clipboards

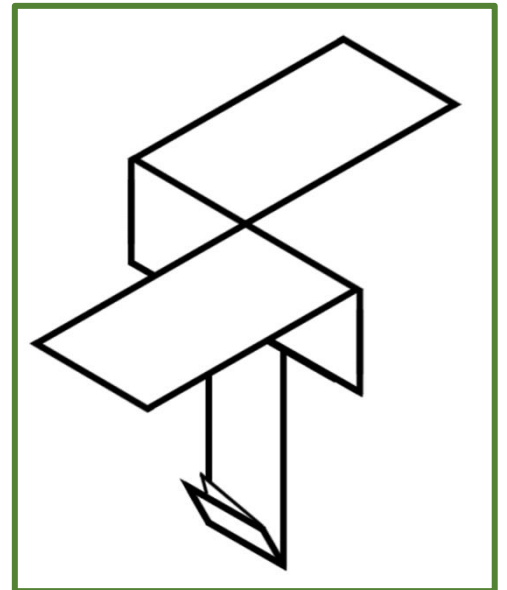
Pencils

Timers

Investigation record sheet (see below)

What do we do?

- Explain that they are going to investigate how they can affect the speed that a paper helicopter descends.
 - What ideas do the pupils have about this?
 - Do they know what forces will be acting on the helicopter?
 - What factors could influence how fast the helicopter falls?
- How do the pupils think we could investigate this?

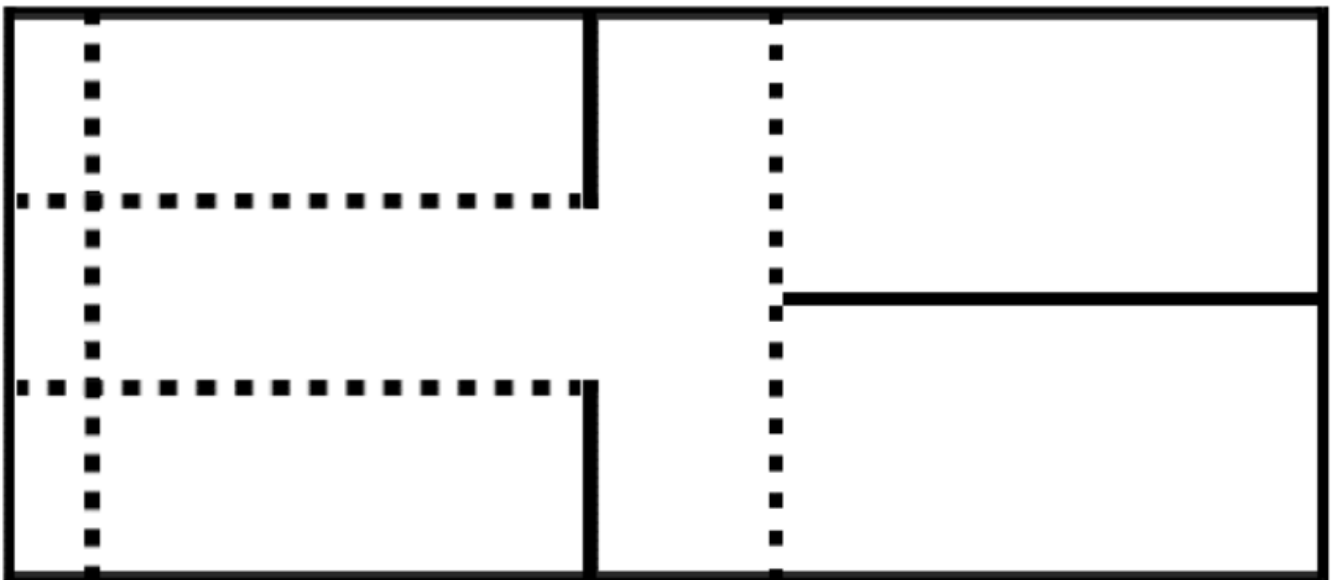
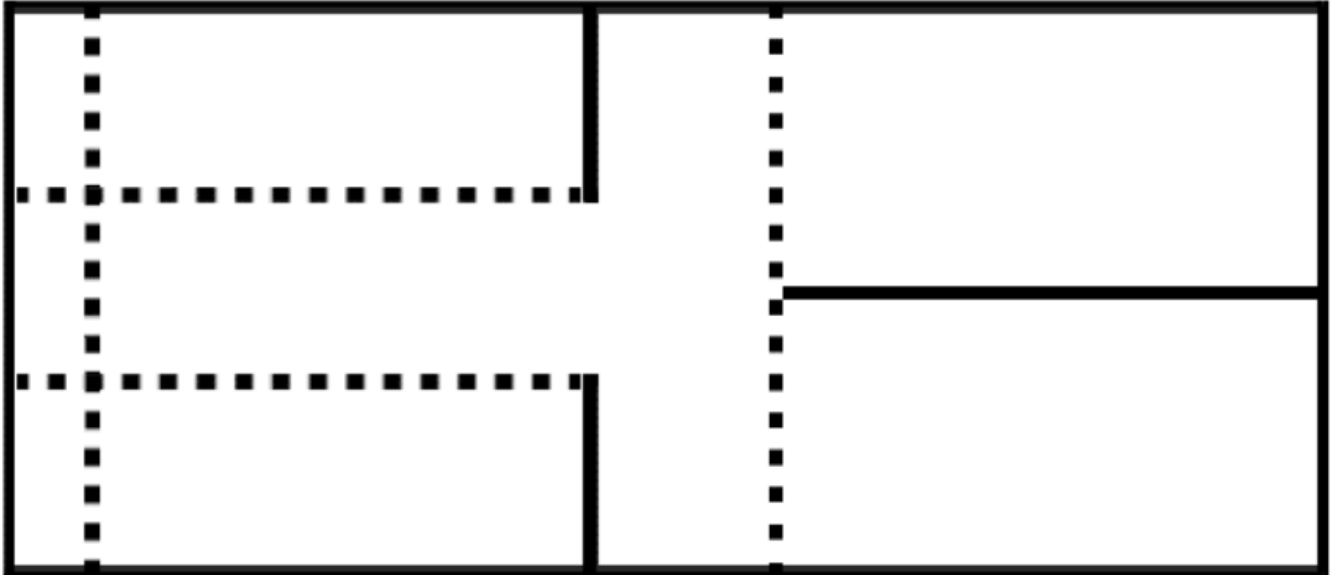


The helicopters can be dropped from the Peace Pagoda. Features that can be altered are the number of paperclips attached to the bottom of the helicopter 'body' (making it heavier), the width of the wings (providing more air resistance), length of the 'body'. Pupils could investigate each of these features or just one of them.

- How will they make it fair?
- What will they record?



Will it fly? Helicopter template





Science in Battersea Park – Year 5



Will it fly? Record sheet

Names: _____

Your hypothesis:

What element of the helicopter are you changing? _____

Change made	Flight time	What you noticed

Explain why you got the results that you did.

