



## Stamping Letters



### The problem

It is too windy to play outside so Jill is helping out in the post office stamping letters. Her arm is getting sore from stamping, she is very tired and she wishes there was a way of using the wind to help her!

Can you find a way to help her out?

# Stamping Letters

## Objectives

Applying knowledge of:

- Renewable energy
- Levers
- Cams
- Gears
- Observing, improving and measuring
- Applying principles of fair testing and product safety

## Other materials required

- Paper
- Scissors
- Tape

## Fair testing and fun

- Does the stamper mechanism work in the wind?
- Does it actually stamp paper?
- How productive is it?
- How energy efficient is it?
- How safe is it?

## Extra challenges

- Make a special conveyor system to carry 'letters' under the stamper.
- Make a real ink transfer stamp out of an old eraser with a ballpoint ink message on it. Can you write in mirror writing so you can read the message?  
How many times will it stamp before you need to re-ink it?
- Design and make a system that will tell you automatically how many times the stamper has stamped.

◀ Need help?  
Look at:



The Hammer



Windmill



Principle Models Building  
Instructions booklet for  
levers and gears