

# Industrial Technology

## Research – Injection Moulding

### TEP Injection moulding kit experiment.

This is an existing injection moulding kit for use in schools and colleges. It is used for the production of small artefacts in “batches” or “one-off” runs. The material normally used is plastic glue obtained in the form of sticks 150mm to 250mm long 12mm diameter.

The experiment you are about to undertake will require planning, the recording of the results and evidence, an analysis of the evidence and evaluating the evidence.

Using the headings below, and the empty chart given to you, produce a “prompt sheet” showing your plan and your results.

<b>PLANNING</b>	
Write down the title of your investigation.	
List all the apparatus and equipment you plan to use and say how you will use it.	
What part of the test will you change /vary and say how you will do this.	
What part of the test will you not change and why you will do this.	
What part of the testing can you not change or control – explain.	
Write down the safety points you must consider.	
Write down what data and information you will need to take to enable an evaluation.	
Write down what you think may happen with each of the parts of the test.	1 2 3

Name:

Obtaining the evidence	
<p>Record the evidence you have collected. Record it as clearly and as accurately as you can. You may add photographs later.</p>	

Name:

Analysing the evidence	
State what you have found out	
Draw diagrams to illustrate your findings. (What parts of the object/mould are you looking at and why?)	
Did you accurately predict what would happen in the experiment based on prior knowledge?	

Name:

<b>Evaluating your evidence</b>	
Did he test/experiment work well?	
Describe any problems you had with the experiments – e.g. did the equipment work well and were the materials suitable?	
What could you change if you were to do the experiment again?	
Write down further information that you could use taken from the experiment that you could use when you produce the specification for your design.  Think about the quality of the plastic artefact and the way the TEP injection moulding kit worked.	

**Name:**