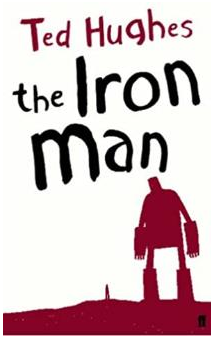
DT – 3D Iron Man (Year 4)

Outcome: To create a 3D Iron Man with an electrical system.

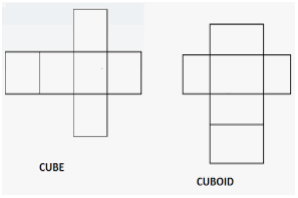
Prior Knowledge and Skills	
Structures:	
	Use paper-mache to build a three-dimensional structure
	Accurately shape and mould the volcano to construct a strong, stable structure
	Make a functional three-dimensional volcano with aesthetic qualities

Ideas and inspiration:

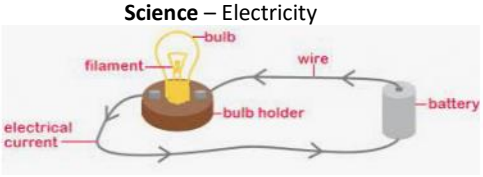
English – The Iron Man



Maths – Nets



Science – Electricity



Completed Iron Man with light up eyes



Vocabulary:

design criteria	a list of what your design must do
construct	verb: to build, make or create something
electrical system	a collection of wires and electrical parts that join together
net	a flat pattern that can be folded along its edges to form a three-dimensional (3D) shape.
cube	a 3D shape with 6 square faces
cuboid	a 3D shape with 6 rectangle faces

Developing Knowledge and Skills

Design:		Below	Just at	At	Above
	To plan and sketch realistic ideas for a three-dimensional Iron Man				
	To design and develop a purposeful and functional Iron Man with explanations and annotated drawings				
	To discuss and use mathematical knowledge of nets of cubes and cuboids				
	To understand and explain electrical systems linked to science				
Make:		**Below**	**Just at**	**At**	**Above**
	To successfully build a three-dimensional structure				
	To accurately cut, shape and join the Iron Man to construct a strong, stable structure				
	To use an electrical system to create light-up eyes				
	To make a functional three-dimensional Iron Man with aesthetic qualities				
Evaluate:		**Below**	**Just at**	**At**	**Above**
	To test the electrical system				
	To evaluate the positive stages of the design and make process				
	To evaluate the challenges of the design and make process				
	To make suggestions for future improvements				

The best bit about my Iron Man was_____

_____

My Iron Man would have been even better if _____

_____

What have I learnt?

_____

_____