

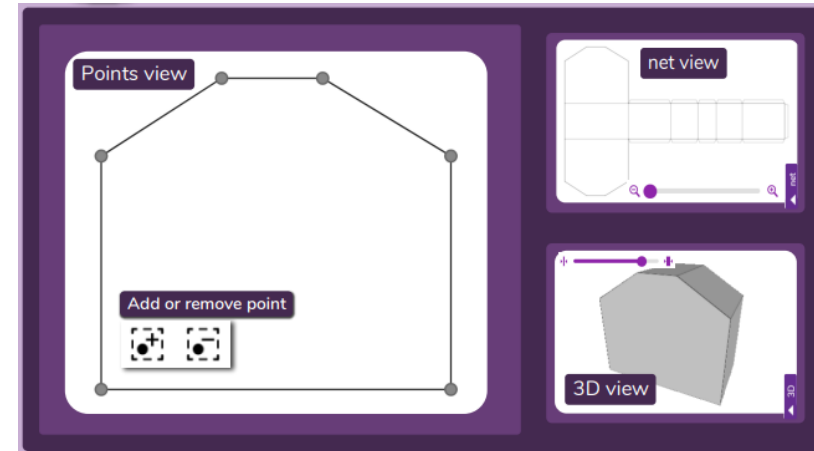
3D Printing	The process of making a physical object from a three-dimensional digital model, typically by laying down many thin layers of a material in succession.
Computer Aided Design (CAD)	Using computer software to help create designs. CAD is used by engineers, architects, and product designers to make accurate models before building them in real life.
Design Brief	A set of instructions or a challenge that explains what needs to be designed.
Model	A digital or physical version of an object that shows what it looks like.
Net	A flat, 2D pattern that folds up to make a 3D shape.
Points	A corner of a 2D or 3D shape that can be moved during CAD.
Prototype	A first version of a design that is made to test out ideas
Three Dimensional (3D)	A solid shape that has length, width, and depth.
Two Dimensional (2D)	A flat shape that only has length and width.

3D Modelling

Key Resources



2Design and Make



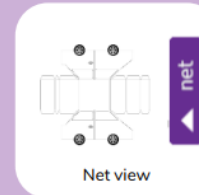
Key Learning

- To explore and develop simple 3D models using CAD software.
- To explore the effect of moving points when designing.
- To plan, design and begin creating packaging to meet a design brief.
- To refine, assemble and evaluate the finished packaging prototype.

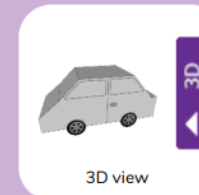
Key Questions

- What is CAD and why is it useful?
- How can moving points change a 3D model?
- Why is packaging important in product design?
- What is a prototype and why do designers use it?

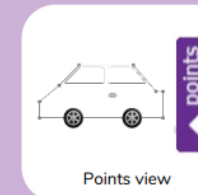
Key Images



Net view



3D view



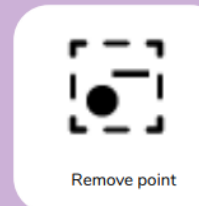
Points view



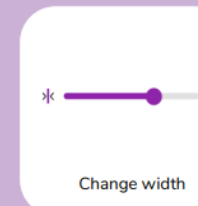
Pattern fill tool



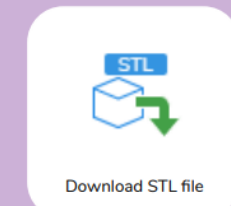
Add point



Remove point



Change width



Download STL file