







Subject: Design Technology

Year: 9 Teaching block: 7

Topic: Advanced Design Skills

Assessment week: 19th November

During this topic you will develop and demonstrate the following PLTS:

Creative thinker ✓		Team player	
Reflective learner ✓		Effective participator	
Independent enquirer		Self-manager ✓	

What I will learn?	Completed	RAG
How to draw more complex isometric and oblique shapes	<input type="checkbox"/>	
How to use 'crating' effectively	<input type="checkbox"/>	
How to render effectively	<input type="checkbox"/>	
How to draw an exploded drawing	<input type="checkbox"/>	
How to create an orthographic drawing	<input type="checkbox"/>	
About existing designers	<input type="checkbox"/>	
What design methods you could use (design methodology)	<input type="checkbox"/>	
How to use Autodesk Inventor	<input type="checkbox"/>	

Key vocabulary for this topic:

Key Word	Definition	Key Word	Definition
autodesk		biomimicry	
exploded drawings		design methodology	
orthographic drawings		extruding	

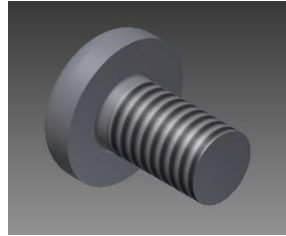
HOMEWORK

Independent Study

What?	When?	Tick when completed
Download Autodesk Inventor 2014 (free) and experiment with it Mobile phones Complete drawing skills Design movements timeline Update knowledge organiser and keywords Revision	w/c 3 rd Sep w/c 17 th Sep w/c 1 st Oct w/c 15 th Oct w/c 29 th Oct w/c 12 th Nov	

Autodesk Inventor

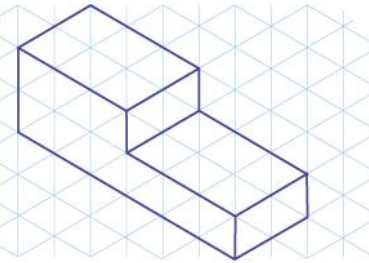
- Sketching
- Extruding
- Rotating
- Patterns
- Sweeps
- Render
- Combine
- Working Drawings



Isometric grid paper is made up of many small cube shapes.

When creating the 3D drawing, it can be a good idea to first produce the outline of a single side.

It is then a matter of extending lines from each corner to create the full representation.

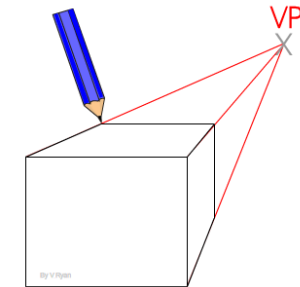


Isometric Drawing

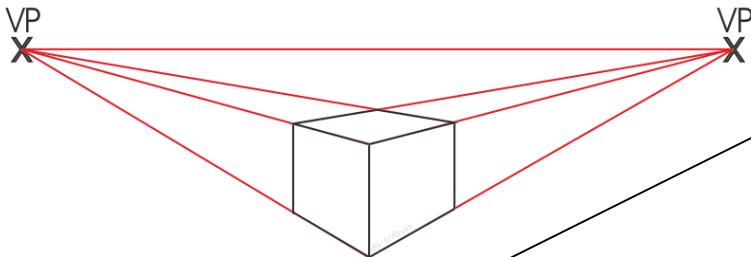
Advanced Design Skills

KNOWLEDGE ORGANISER

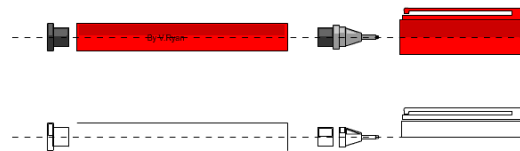
Single Point Perspective



Two Point Perspective



Exploded Drawings



Cross Sections

