

## **Year 7 Key Stage 3 Independent Learning Tasks.**

### Knowledge

1. Review [www.technologystudent.com](http://www.technologystudent.com) to expand knowledge of unfamiliar processes.
2. Review Focus Educational Software on the varying topic areas. This can be accessed by accessing the Carre's Grammar School Intranet and clicking on Links – Website General / Focus Educational Software. Attempt the multiple-choice tests at the end of the topic areas.
3. Review [Ingenia - Home](#) – This is a database of magazines published by the royal academy of engineering. In reviewing this this will help with your current understanding of the wider issues of engineering.

### Skills

1. Review [Sketch A Day - YouTube](#) . This will give you an insight into how an industrial/product designer goes about designing.
2. Download the CAD software Solidworks here and the 2D Design Software here. Using your existing knowledge and understanding and online tutorials use the software to develop your understanding.

### Methods of completion

1. Create mind maps, glossary's and flash cards of the topics areas that you are reviewing.
2. Use sketching and rendering techniques to sketch a domestic product from observation.
3. Use Solidworks to test topics learnt in class.

## **Year 8 Key Stage 3 Independent Learning Tasks.**

### Knowledge

1. Review [www.technologystudent.com](http://www.technologystudent.com) to expand knowledge of unfamiliar processes.
2. Review Focus Educational Software on the varying topic areas. This can be accessed by accessing the Carre's Grammar School Intranet and clicking on Links – Website General / Focus Educational Software. Attempt the multiple choice tests at the end of the topic areas.
3. Review [Ingenia - Home](#) – This is a database of magazines published by the royal academy of engineering. In reviewing this this will help with your current understanding of the wider issues of engineering.

### Skills

1. Review [Sketch A Day - YouTube](#) . This will give you an insight into how an industrial/product designer goes about designing.
2. Download the CAD software Solidworks here and the 2D Design Software here. Using your existing knowledge and understanding and online tutorials use the software to develop your understanding.

### Methods of completion

1. Create mind maps, glossary's and flash cards of the topics areas that you are reviewing.
2. Use sketching and rendering techniques to produce exploded diagrams of a domestic product from observation and research.
3. Use Solidworks to test topics learnt in class, which should include assemblies (adding components, mating and aligning)

## Year 9 Key Stage 3 Independent Learning Tasks.

### Knowledge

1. Develop knowledge of design movements from the list below:
  - a. Arts and Crafts
  - b. Art Noveau
  - c. Bauhaus Modernism
  - d. Art Deco
  - e. Streamlining
  - f. New Design Style
2. Study a domestic product and analyse this using ACCESSFM (Appearance, Customer, Cost, Environment, Safety, Size, Function, Materials)

### Skills

1. Develop your Freehand, Isometric and Engineering Drawing techniques using the following links:

Freehand sketching : [http://www.youtube.com/channel/UC62Ngsd\\_ZBWkX-6yFV-10UQ](http://www.youtube.com/channel/UC62Ngsd_ZBWkX-6yFV-10UQ)

Freehand sketching : <http://www.youtube.com/channel/UCij28MWvyclFJ6FY2zYFiiw/videos>

Freehand sketching : <http://www.youtube.com/user/DiennoAcademy/videos>

Isometric sketching : <http://www.youtube.com/channel/UCcsmhvZ6HrVZFLmup-rSwPw/videos>

Isometric sketching : <http://www.youtube.com/user/DiennoAcademy/videos>

Engineering drawings : <http://www.youtube.com/channel/UCcsmhvZ6HrVZFLmup-rSwPw/videos>

Engineering drawings : <http://www.youtube.com/watch?v=Yppofn91N0U>

Engineering drawings : <http://www.youtube.com/watch?v=SdLegfoMXNA>

Engineering drawings : <http://www.youtube.com/watch?v=SaOoKpLBfYo>

### Methods of completion

1. Create the following table to document your research on design movements:

Movement	Philosophy	Style	Designers	Visual Reference
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2. Follow the tutorials and then apply to a product of your choice.