

# LONG TERM PLANS

Year 7 (2015-16)



## ADT Faculty – carousel delivery model – order may change

### YEAR 2015-2016

#### Autumn term

Half term 1	Half term 2
<p><b>Project Title:</b> 1.5 volt Cell Tester (CT) Pupils will develop a basic understanding of electrical components and electricity, improving their fine hand eye coordination skills and motor skills whilst manipulating small components in order to make their '1.5v Cell Tester'. Pupils will make an electronic circuit on card (Mobile Phone image) using copper track, single strand conductor wire and Thermochromic card (SMART materials). The Pupils will develop and realise the importance of accurate marking out and develop soldering skills and BASIC production processes. They will be introduced to a wide selection of specialist vocabulary as used in Industry and by Electricians and Engineers. <b>Key Assessment Activity:</b> The Pupils will be asked to reflect on the making of their Project as part of their final assessment activity and to complete an End of Module test to confirm understanding and to identify the Pupils attainment.</p>	<p><b>Project Title:</b> Acrylic Door Plaque Project Pupils develop their understanding of Graphic Products and CAD/CAM in a six-week half term, making use of drawing techniques and CAD to explore design, drafting and manufacture of a plastic product. Pupils will explore the role of a designer or engineer who works with CAD/CAM, taking into account training required and particular techniques for drafting CAD data for new products, to successfully create a new plastic product making use of laser cutting. Pupils will develop skills in 2D Design <b>Key Assessment Activity:</b> Cross curricular links: (English) Spelling and correct use of language and terminology is vital for accurate work and transmission of ideas. (Maths) –Accurate marking out and use of materials -dimensions / measuring needed to make the projects.</p>

#### Spring term

Half term 1	Half term 2
<p><b>Project Title:</b> Letter Rack Pupils are introduced to wood and its working characteristics and properties. They use various hand skills and some machine processes to work towards producing a product to hold envelopes. The design process is generally covered with detailed planning to ensure completion of a high quality product. An introduction to wood (hardwood, softwood and manufactured board), which can be used as a skills base to understanding and working with materials with differing characteristics throughout Design and Technology. <b>Key Assessment Activity:</b> Cross curricular links: (English) Spelling and correct use of language and terminology is vital for accurate work and transmission of ideas. (Maths) –Accurate marking out and use of materials -dimensions / measuring needed to make the letter rack.</p>	<p><b>Key Experiences:</b></p> <ul style="list-style-type: none"> <li>• Understand the health and safety considerations of a Design and Technology Workshop</li> <li>• Introduction to the use of wood (pine) in designing and making</li> <li>• Understand the working characteristics and properties of wood and the importance of wood grain in design and making</li> <li>• Understand the purpose of a situation, design brief and specification when designing</li> <li>• Understand the importance of forward planning</li> <li>• Be able to work safely and competently with a variety of hand tools</li> <li>• Be able to work safely and competently with machinery – disc sander</li> </ul> <p><b>Key Assessment Activity:</b> The Pupils will be asked to reflect on the making of their LR Project as part of their final assessment activity and to complete an End of Module test to confirm understanding and to identify the Pupils attainment.</p>

#### Summer term

Half term 1	Half term 2
<p><b>Project Title:</b> Licence to Cook Licence to cook with an introduction to Food Technology (research, designing and evaluation). Key Experiences: Making fresh fruit salad, flapjacks, soup, cup-cakes and decorating cakes, pasta dish, pizza toasts. Protection – hygiene and safety, referring to micro-organisms and the effects of micro-organisms on our bodies. <b>Key Assessment Activity:</b> To prepare and produce a variety of food dishes.</p>	<p><b>Project Title:</b> Licence to Cook Nutrition – healthy eating, referring to the food groups and the five nutrients, plus fibre. Simplistic functions of the five nutrients and fibre. Considering functions of ingredients <b>Key Assessment Activity:</b> Cross curricular links: Literacy: Subject specific language e.g., dicing, peeling, rubbing in, grilling, creaming, simmering, boiling. Numeracy: Weighing, measuring, setting temperatures, calculating cooking times ICT: Designing a safety and hygiene poster for a food handler, Healthy eating poster</p>

