



Construction

## Year 10- Half Term 1- Health and Safety and Wood Joints

<b>Prior Learning</b>	This is the start of your new construction course. This is an exciting course and will give you lots of great opportunities in the future. A lot of the skills you will learn are new but you will be able to use past skills from Product design. Important skills you can use are measuring tool and machinery use and all your problem solving skills.
<b>What will I learn?</b>	<p>During this first half term you will learn about Health and Safety in the construction Industry. You will learn about the law which applies to all workers. You are also going to learn about all the basic wood joints you will need to use throughout this course. Joints you will learn about are lap, bridge, halving and mortice and tenon joints.</p> <p>You will also learn about all the tools needed to cut these joints. These include marking gauge, marking knife, tenon saw and try square.</p>
<b>Next Steps</b>	This project builds the skills needed for Task 2 which will be started in Half term 3. These skills are also an essential life skill but also form the basis for any pupil wanting an apprenticeship in the carpentry trades.
<b>Personal Development</b>	This project will develop resilience when learning new tasks ( it is tricky!!) it also develops problem solving techniques and using logical thinking to solve a problem. It will develop confidence in tackling complex tasks. This task will also study Health and safety and you will understand that your behaviour has a serious impact on others. You will learn that you have a responsibility to others as well as yourself.
<b>Key vocabulary</b>	Marking gauge, Marking Knife, Tenon saw, try square, measurement, working drawing, evaluate.
<b>How and when will I be assessed?</b>	<p>Assessment of this task is continuous. Instant feedback will be given and instant corrections will be made by the pupil. Constant peer assessment will be used.</p> <p>Formal tests will be taken on the H&amp;S topic at the end of Half term 1.</p>
<b>Resources to use</b>	All resources are supplied by the school. The knowledge organiser details all the joints to be cut and the tools to use. You can find out more about H&S at the HSE website. <a href="https://www.hse.gov.uk/">https://www.hse.gov.uk/</a>
<b>Enrichment opportunities</b>	<p>Find out more about jobs and training through CITB <a href="https://www.citb.co.uk/">https://www.citb.co.uk/</a></p> <p>U tube has lots of great instructional videos. One is below for cutting lap joints. If you have space you can always buy a few tools and practise at home. We can supply wood. <a href="https://www.youtube.com/watch?v=esy25rsWtI4">https://www.youtube.com/watch?v=esy25rsWtI4</a></p>

## Year 10- Half Term 2- Electrical work

<b>Prior Learning</b>	This is a totally new topic and all subject matter is new. However prior learning about H&S will be essential for this project. Also the lessons learnt about problem solving in a logical manner will be invaluable.
<b>What will I learn?</b>	<p>During this project you will learn how to wire a plug and an extension lead. The main areas covered are as follows.</p> <ul style="list-style-type: none"> <li>• H&amp;S in electrical installation.</li> <li>• How to wire a 3 pin plug</li> <li>• Identifying wires</li> <li>• Stripping wires</li> <li>• Attaching wires to terminals.</li> </ul>
<b>Next Steps</b>	This project builds the skills needed for Task 2 which will be started in Half term 3. These skills are also an essential life skill but also form the basis for any pupil wanting an apprenticeship in the electrical trades.
<b>Personal Development</b>	This project will develop resilience when learning new tasks ( it is tricky!!) it also develops problem solving techniques and using logical thinking to solve a problem. It will develop confidence in tackling complex tasks.
<b>Key vocabulary</b>	Cable, Terminal, Earth, Live, Neutral, Copper, Wire strippers
<b>How and when will I be assessed?</b>	<p>Assessment of this task is continuous. Instant feedback will be given and instant corrections will be made by the pupil. Constant peer assessment will be used.</p> <p>The final project will be formally assessed using electrical safety criteria and will be marked by the pupil, peers and teacher.</p>
<b>Resources to use</b>	All resources are supplied by the school. Due to the nature of electrical work we cannot recommend that pupils supply their own resources.
<b>Enrichment opportunities</b>	<p>Due to the nature of Electrical work we cannot recommend that pupils practice further at home. However, further information about electrical work can be found at.</p> <p><a href="https://www.google.co.uk/search?q=wiring+3+pin+plug&amp;gws_rd=ssl#spf=1587462302843">https://www.google.co.uk/search?q=wiring+3+pin+plug&amp;gws_rd=ssl#spf=1587462302843</a></p> <p><a href="https://www.youtube.com/watch?v=4j2d99WPpMA">https://www.youtube.com/watch?v=4j2d99WPpMA</a></p>

## Year 10- Half Term 3- Electrical work Coursework

<b>Prior Learning</b>	This is a further development and use of the skills learnt in half term 2. Pupils will need to understand how to strip and connect wires correctly and safely. They will also need to use previous skills learnt reading electrical diagrams. However prior learning about H&S will be essential for this project. Also the lessons learnt about problem solving in a logical manner will be invaluable.
<b>What will I learn?</b>	<p>During this project you will learn how to wire a plug, junction box, light switch and a single light. The main areas covered are as follows.</p> <ul style="list-style-type: none"> <li>• H&amp;S in electrical installation.</li> <li>• How to wire a 3 pin plug</li> <li>• How to wire junction box.</li> <li>• How to wire a switch</li> <li>• How to wire a light socket and fit a bulb.</li> </ul>
<b>Next Steps</b>	This project is part of Task 2 which is worth 50% of your course. After completion of the task you will produce a project report. These skills are also an essential life skill but also form the basis for any pupil wanting an apprenticeship in the electrical trades.
<b>Personal Development</b>	This project will develop resilience when learning new tasks ( it is tricky!!) it also develops problem solving techniques and using logical thinking to solve a problem. It will develop confidence in tackling complex tasks.
<b>Key vocabulary</b>	Feed, Wire Cutters, Screwdriver, Clamp, achieve, evaluate, conclude.
<b>How and when will I be assessed?</b>	<p>Assessment of this task in continuous. Instant feedback will be given and instant corrections will be made by the pupil. Constant peer assessment will be used.</p> <p>The final project will be formally assessed using electrical safety criteria and will be marked by the pupil, peers and teacher. This project will be photographed and used as part of your coursework.</p>
<b>Resources to use</b>	All resources are supplied by the school. Due to the the nature of electrical work we cannot recommend that pupils supply their own resources.
<b>Enrichment opportunities</b>	<p>Due to the nature of Electrical work we cannot recommend that pupils practice further at home. However, further information about electrical work can be found at.</p> <p><a href="https://www.google.co.uk/search?q=wiring+3+pin+plug&amp;gws_rd=ssl#spf=1587462302843">https://www.google.co.uk/search?q=wiring+3+pin+plug&amp;gws_rd=ssl#spf=1587462302843</a></p> <p><a href="https://www.youtube.com/watch?v=4j2d99WppMA">https://www.youtube.com/watch?v=4j2d99WppMA</a></p> <p><a href="#">Information about electrical apprenticeships can be found here.</a></p> <p><a href="https://www.jtltraining.com/apprenticeships/apprenticeship-courses/electrical-apprenticeships/?gclid=EAlaIQobChMIxfLy3qD56AIViaztCh2eNgNpEAAYASAAEgLmIPD_BwE">https://www.jtltraining.com/apprenticeships/apprenticeship-courses/electrical-apprenticeships/?gclid=EAlaIQobChMIxfLy3qD56AIViaztCh2eNgNpEAAYASAAEgLmIPD_BwE</a></p>

## Year 10- Half Term 4- Window Project ( Coursework)

<b>Prior Learning</b>	This is a further development of the skills learnt in half term 1. Pupils will need to build on their skills cutting bridle joints and using all marking out tools accurately. It is essential that pupils use all their problem solving and planning skills for this project.
<b>What will I learn?</b>	<p>During this project you will learn how to produce a full window frame and how to glaze it ( Perspex). You will produce a frame measuring 600mm by 600mm. It will be connected with Bridle joints and have a router rebate to hold the Perspex. It will be finished with a hand made moulding.</p> <p>You will learn how to use the router both on a router table and a palm router. This is part of your coursework project so quality is paramount.</p>
<b>Next Steps</b>	This project is part of Task 2 which is worth 50% of your course. After completion of the task you will produce a project report. These skills are also an essential life skill but also form the basis for any pupil wanting an apprenticeship in the construction trades.
<b>Personal Development</b>	This project will develop resilience when learning new tasks .It also develops problem solving techniques and using logical thinking to solve a problem. It will develop confidence in tackling complex tasks. It is important to learn that as a construction worker you are producing products for others. You need to develop sense of pride in the quality of your work.
<b>Key vocabulary</b>	Bridle joint, Mitre joint, Mitre saw, Palm Router, Table router, Moulding, Rebate.
<b>How and when will I be assessed?</b>	This is part of Task 2 ,which is 50% of your final assessment. You need to assess your work constantly and you can re- start at any time. It is the final product, which is important. Do not worry about mistakes on the way. The final practical product will be marked as part of your coursework.
<b>Resources to use</b>	<p>All resources will be supplied by the school. Due to the the nature of course work all work must be completed in school. Information about using a mitre saw can be found here.</p> <p><a href="https://www.google.co.uk/search?q=how+to+use+hand+mitre+saw+video&amp;gws_rd=ssl#spf=1587464774357">https://www.google.co.uk/search?q=how+to+use+hand+mitre+saw+video&amp;gws_rd=ssl#spf=1587464774357</a></p>
<b>Enrichment opportunities</b>	Find out more about the construction trades of Joinery and Carpentry. Contact your careers officer and arrange a visit to college. You can also ask to visit the CITB training centre in Kirkham.

## Year 10 - Half Term 5 – Health & Safety

<b>Prior Learning</b>	Pupils have studied H&S at the start of this course in Half term 1. The information and knowledge learnt from half tem 1 will now be used to further develop the H&S unit.
<b>What will I learn?</b>	<p>During this half term pupils will learn more about the role of the H&amp;S executive (HSE). Pupils will also learn to write risk assessments for practical tasks and machinery. They will learn to identify risks and give suggestions about how risks could be reduced and which PPE should be used for each task.</p> <p>Types of fire extinguishers will be studied and pupils will need to be able to identify which type of extinguisher is used for each type of fire.</p>
<b>Next Steps</b>	This unit is essential for anyone thinking of working in the construction industry. This is Law and must be followed by all workers. This unit forms the basis of the 1 hour exam taken in June. College and apprenticeships will demand that this exam has been passed at level 2 before any pupil can go onto a site to work.
<b>Personal Development</b>	This unit is about developing a personal responsibility to your health and safety and the health and safety of those you work with. Pupils must have a level of maturity to understand the seriousness of H&S at work. Poor practices at work can have a serious effect on your long term health.
<b>Key vocabulary</b>	HSE, PPE, control method, risk assessment, COSHH, PEWER, fire extinguisher.
<b>How and when will I be assessed?</b>	Class tests will be used each week. Final exam will be taken in June. Please note this is the actual exam which is taken in year 10. It is a 1 hour online exam. A practice online exam will be taken in April.
<b>Resources to use</b>	All resources for this exam are supplied in the form of revision guides. Further information can be found at HSE. <a href="https://www.hse.gov.uk/">https://www.hse.gov.uk/</a>
<b>Enrichment opportunities</b>	You can visit the CITB website. <a href="https://www.citb.co.uk/">https://www.citb.co.uk/</a> U tube has many videos about H&S. Search H&S in Construction. See the careers advisor about jobs in construction.

## Year 10 - Half Term 6 – Health & Safety Exam

<b>Prior Learning</b>	This is a new unit. Although pupils have not tiled before they will be able to use many of the skills learnt on previous tasks. Important skills to use are, measuring, sawing, filing, working out areas. Pupils also need to use all their problem solving skills.
<b>What will I learn?</b>	During this half term pupils will learn how to tile using ceramic tiles. Pupils will learn to work out areas and calculate number of tiles needed and how much wastage needs to be calculated in for cutting. Pupils will learn to cut tiles straight, cut around shapes such as electric boxes and pipes. Applying adhesive and grout will be taught. At the end of this unit you will be prepared for year 11 half term 1.
<b>Next Steps</b>	This unit is essential for completing the tiling task which is the final part of Task 2 ( 50%) It is essential that this task develops the skills needed to produce a quality final piece of work for assessment. This unit is also essential for pupils wanting to work in the construction industry. It is also a valuable life skill.
<b>Personal Development</b>	As always in construction tasks this unit is about developing a personal responsibility to your health and safety and the health and safety of those you work with. Once again you will develop your problem solving skills and develop resilience when working. Tiles are delicate and unpredictable you must learn to be positive when things do not go as planned.
<b>Key vocabulary</b>	Tile, Adhesive, Grout, Nibbler, Tile cutter, spacers, tile saw, wastage.
<b>How and when will I be assessed?</b>	This is a practice piece so you will be assessed and be assessing all the time. You can re start at any point. The aim of this task is to become more expert when tiling.
<b>Resources to use</b>	For this task all materials and resources are supplied. However you can search u tube for instructional films on Tiling. Here is one to follow. <a href="https://www.youtube.com/watch?v=eRWYk7vA9AA">https://www.youtube.com/watch?v=eRWYk7vA9AA</a>
<b>Enrichment opportunities</b>	You can visit the CITB website. <a href="https://www.citb.co.uk/">https://www.citb.co.uk/</a> U tube has many videos Tiling. See the careers advisor about jobs in construction. Wickes and B&Q have a whole range of DIY skills.

## Year 11 - Half Term 1 – Tiling (part of coursework)

<b>Prior Learning</b>	Pupils have completed yr 10 skill building in Tiling, Electrical work and Carpentry. Pupils have started Task 2 and will have completed the electrical task and the carpentry task. These have been written up and the last task is Tiling. All work will be written up for their task 2 assessment worth 50% of the course.
<b>What will I learn?</b>	<p>You will learn how to work out an area to tile and calculate the number of tiles needed, the cost of the tiles and wastage. Pupils will learn how to cut tiles using tile cutters and nibblers. Tiles will be cut to fit around cooker sockets. Tiles will be dry spaced and then stuck down with tile adhesive. Pupils will mix grout and grout the tiles after which they will clean the tiles.</p> <p>Once complete the tile project will be written up as the final part of task 2.</p>
<b>Next Steps</b>	<p>After this project has been written up pupils will produce a final evaluation of all tasks. Then the whole project task 2 will be reviewed edited and then handed in for final marking by December. Deadline date will be given. This work will lead on to level 3 course at college and apprenticeships.</p> <p><a href="https://blackpool.ac.uk/course/cb1fe166">https://blackpool.ac.uk/course/cb1fe166</a>  <a href="https://blackpool.ac.uk/course/cb1fe166">https://blackpool.ac.uk/course/cb1fe166</a></p>
<b>Personal Development</b>	This project continues to develop personal confidence problem solving and co operative working. It is preparing pupils to develop the skills needed to work in the construction industry which includes resilience and respect of others.
<b>Key vocabulary</b>	Tiling, Adhesive, Grout, Spacer, Nibbler, Spreader, Area, Electrical Socket, Polishing, File.
<b>How and when will I be assessed?</b>	This is part of Task 2 worth 50% of the course. The coursework is to be finished by Christmas. It will then be marked and sent to the exam board. After this has been completed the focus will be on Task 3 which is a 2 hour exam focussing on Planning builds.
<b>Resources to use</b>	<p>All practical resources are supplied by school. All revision notes are supplied by school. CITB jobs film is at; <a href="https://www.youtube.com/watch?v=cDLwhCHOOY0">https://www.youtube.com/watch?v=cDLwhCHOOY0</a>  <a href="https://www.youtube.com/watch?v=xTiqFF9MjLA">https://www.youtube.com/watch?v=xTiqFF9MjLA</a></p> <p>Text <span style="float: right;">book:</span>  <a href="https://www.illuminatepublishing.com/index.php?main_page=product_info&amp;cPath=34&amp;products_id=228">https://www.illuminatepublishing.com/index.php?main_page=product_info&amp;cPath=34&amp;products_id=228</a></p>
<b>Enrichment opportunities</b>	CITB will visit to talk about jobs in the construction industry. Career officer will be available to help find apprenticeships. Opportunity to visit College.



## Year 11 - Half Term 1 – Task 2 Coursework Making Projects

<b>Prior Learning</b>	Pupils have completed yr 11 skill Tasks in Tiling, Electrical work and Carpentry. All work has been written up in draft form for their task 2 assessment worth 50% of the course.
<b>What will I learn?</b>	This part of the course is about completing Task 2 and learning to write a report for your employer. You will learn, how to write a brief and specification for work and how to budget for a job. You will learn about, wearing the correct PPE and how to follow safety law. You will also learn how evaluate your work and give an overview of the task.
<b>Next Steps</b>	The whole project task 2 will be reviewed edited and then handed in for final marking by December. Deadline date will be given. This work will lead on to level 3 course at college and apprenticeships. <a href="https://blackpool.ac.uk/course/cb1fe166">https://blackpool.ac.uk/course/cb1fe166</a> <a href="https://blackpool.ac.uk/course/cb1fe166">https://blackpool.ac.uk/course/cb1fe166</a>
<b>Personal Development</b>	This project continues to develop personal confidence problem solving and co operative working. It is preparing pupils to develop the skills needed to work in the construction industry which includes resilience and respect of others.
<b>Key vocabulary</b>	Tiling, Adhesive, Grout, Spacer, Nibbler, Spreader, Area, Electrical Socket, Polishing, File.
<b>How and when will I be assessed?</b>	This is part of Task 2 worth 50% of the course. The coursework is to be finished by Christmas. It will then be marked and sent to the exam board. After this has been completed the focus will be on Task 3 which is a 2 hour exam focussing on Planning builds.
<b>Resources to use</b>	All practical resources are supplied by school. All revision notes are supplied by school. CITB jobs film is at; <a href="https://www.youtube.com/watch?v=cDLwhCHOOY0">https://www.youtube.com/watch?v=cDLwhCHOOY0</a> <a href="https://www.youtube.com/watch?v=xTiqFF9MjLA">https://www.youtube.com/watch?v=xTiqFF9MjLA</a>  Text <span style="float: right;">book:</span> <a href="https://www.illuminatepublishing.com/index.php?main_page=product_info&amp;cPath=34&amp;products_id=228">https://www.illuminatepublishing.com/index.php?main_page=product_info&amp;cPath=34&amp;products_id=228</a>
<b>Enrichment opportunities</b>	CITB will visit to talk about jobs in the construction industry. Career officer will be available to help find apprenticeships. Opportunity to visit College.

## Year 11 - Half Term 3 – Planning building

<b>Prior Learning</b>	Pupils have completed yr 10 skill building in Tiling, Electrical work and Carpentry. Pupils have finished Task 2 and will have completed the electrical task and the carpentry task. All tasks have now been written up. Task 2 assessment worth 50% of the course.
<b>What will I learn?</b>	You will now learn about how buildings are planned and constructed. You will learn about the order of building from the planning through to hand over. Main areas to be learnt will be Substructure development Superstructure development 1 <sup>st</sup> and second fixes Finishing Landscaping hard and soft Security and handover.
<b>Next Steps</b>	After this project has been completed pupils will take a mock exam as this project is assessed by a final exam in June worth 20%. After the mock exam pupils will work on areas which need most development. This exam is an important unit for later work at college or for apprenticeships. <a href="https://blackpool.ac.uk/course/cb1fe166">https://blackpool.ac.uk/course/cb1fe166</a> <a href="https://blackpool.ac.uk/course/cb1fe166">https://blackpool.ac.uk/course/cb1fe166</a>
<b>Personal Development</b>	This project continues to develop personal confidence problem solving and co operative working. It is preparing pupils to develop the skills needed to work in the construction industry which includes resilience and respect of others.
<b>Key vocabulary</b>	Sub Structure, Super structure, First fix, Second fix, Foundation, Services, groundworks, footings, mains, hard landscaping, soft landscaping, water management.
<b>How and when will I be assessed?</b>	This is part of Task 3 worth 25% of the course. The classwork will be completed by feb half term. You will complete a full online 2 hour mock exam in March. Revision will then be based around feedback from this exam. Small part exam tests will take place each week during this task.
<b>Resources to use</b>	All practical resources are supplied by school. All revision notes are supplied by school. CITB jobs film is at: <a href="https://www.youtube.com/watch?v=cDLwhCHOOY0">https://www.youtube.com/watch?v=cDLwhCHOOY0</a> <a href="https://www.youtube.com/watch?v=xTiqFF9MjLA">https://www.youtube.com/watch?v=xTiqFF9MjLA</a>  Text book: <a href="https://www.illuminatepublishing.com/index.php?main_page=product_info&amp;cPath=34&amp;products_id=228">https://www.illuminatepublishing.com/index.php?main_page=product_info&amp;cPath=34&amp;products_id=228</a>
<b>Enrichment opportunities</b>	CITB will make 2nd visit to talk about jobs in the construction industry. Career officer will be available to help find apprenticeships. Opportunity to visit College. Please research all CITB u tube films on their u tube channel. Possible visit to building site organised by Redrow homes in Fleetwood dockside.