Acle Academy

Year 10 Unit 1: Construction Technology Creative Industries Faculty				
Rationale and Context of Unit:	**Core curriculum content:**	**Tier 2 & Tier 3 vocabulary explicitly taught:** **Performance Requirements**		
		Marking	**Tools**	**Joining Methods**
The Wensum Trust have teamed up with Lovell to help tackle the skills and jobs shortage in the construction industry and educate young people about the range of career opportunities in the sector. Lovell invited and included Morgan Sindall Construction as part of the partnership, helping to provide further opportunities for young people across the region. The relationship between the five-star partnership housing expert and the not-for-profit multi-academy education Trust will begin with the sponsorship of two students from Acle Academy commencing in September 2021, which will lead onto sponsored apprenticeships the following year. A longer term commitment will provide students at all the Trust's High Schools with opportunities onsite, and the Trust embedding construction into the curriculum for 11 to 16-year-olds.	Unit 2: Construction in Practice content has been divided into two sections, which will be focused on Brickwork. **Learning Outcome A: Risk assessments** Learners will need to understand the use of risk assessments in their practical learning environment. They will also need to analyse their environment to identify hazards and risks in order to produce an initial risk rating. They will need to make recommendations in order to minimise risk to people in their practical learning environment and produce a revised risk rating that shows their controls have brought the risk rating down to an acceptable level. **Learning Outcome B: Brickwork** Learners will develop knowledge and understanding of the uses of different measuring, marking and setting-out tools used in the industry to construct a practical outcome. They will be able to demonstrate safe working and vocationally correct techniques when using these tools to accurately measure, mark and set out. Additionally, learners will understand how to correctly interpret construction specifications and drawings in order to measure, mark and set out materials to construct a practical outcome.	Pencil Tape Rule Builders Square Corner Profiles Guage Rod Spirit Level Line and Pins Coner Blocks Tingle Plate Straight Edge	Walling Trowel Pointing Trowel Jointing Iron Wheeled Recessed Jointer Brick Hammer Club Hammer Bolster Chisel Spirit Level Gauge Rod Facing Bricks Engineering Bricks **Mortars** Lime Cement Coloured	Half Brick One brick Garden Wall Bond Flemish Bond Flemish Garden Bed Joint Buttering the brick Levelling Half Batts Queen Closer Bucket Handle Recessed Flush Weathered Patterns Projecting Recessed Soldiers Cleaning

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Challenge and Support:	Worldwide learning / links to 21st century:	Cultural capital/ Industry/ Enrichment:
Students have not received any direct practical construction skills at KS3. During the National Apprenticeship week Lovells deliver a bespoke program for students expressing an interest in Bricklaying or Carpentry. This will be directed towards Year 10 students who have expressed an interest in Year 9. SEND support will be given in line with individual needs and SEND passports.	Construction generates around £90 billion annually (almost 7% of GDP) and employs more than 2.9 million people, the equivalent of around 10% of the UK workforce. Yet despite these credentials as a powerhouse of the economy, skills shortages remain a persistent issue. The sector lost 140,000 jobs after the economic crash of 2008, and the situation is exacerbated by an ageing workforce hanging up their tools – almost a quarter of construction workers are over 50 and 15% are over 60. In June 2022, the Construction Skills Network forecast that the industry will need to recruit 216,800 new workers by 2025 to meet demand. While it is good news that jobs are being created, the sector has struggled for many years to attract young people as an engaging, dynamic and modern career choice. Skill shortage	The Wensum Trust have teamed up with Lovell to help tackle the skills and jobs shortage in the construction industry and educate young people about the range of career opportunities in the sector. Lovell invited and included Morgan Sindall Construction as part of the partnership, helping to provide further opportunities for young people across the region. The relationship between the housing experts and the not-for-profit multi-academy education Trust will include the sponsorship of two students from Acle Academy commencing in September 2021, which will lead onto sponsored apprenticeships the following year. A longer term commitment will provide students at all the Trust's High Schools with opportunities onsite, and the Trust embedding construction into the curriculum for 11 to 16-year-olds.
Historical, Social, Moral, Spiritual, Cultural context:	**Cross curricular links/ literacy/numeracy:**	**Common misconceptions:**
Man has used brick for building purpose for thousands of years. Bricks date back to 7000 BC, which makes them one of the oldest known building materials. They were discovered in southern Turkey at the site of an ancient settlement around the city of Jericho. Homeownership has a significant positive impact on educational achievement. Interestingly, the main reason for this difference is likely due in large part to greater neighbourhood stability. Ownership behaviour by parents such as being responsible for maintenance and caring for the home as their own also plays a role modelling role.	**Gatsby Benchmark:** https://www.bbc.co.uk/bitesize/articles/zv48scw https://www.bbc.co.uk/bitesize/articles/zvcf8xs https://www.bbc.co.uk/bitesize/articles/zf4bmfr **Maths:** Students will need to apply maths knowledge in a construction context; • Area • Dimension • Ratio • Volume • Quantities	There is a perception that anyone can get a job in construction, that it is a last resort for those who are unemployable elsewhere. And while entry-level jobs are certainly available to those prepared to put in the work, that's not to say it's a walk in the park. Working in construction is full of challenges both physical and mental. Depending on the job role, it might involve planning a project, operating complicated machinery, solving unexpected problems or ensuring compliance with health and safety laws. Construction is still a male-dominated industry. But times are changing fast, and today more women than ever before are choosing careers in the field. More work still needs to be done in order to create a gender-equal environment – but the more female role models there are working in the industry, the more they are slowly changing the perception of construction as a male-only field.

Assessment timeline:		
Students will continually develop their practical skills until they have the confidence and ability to achieve a suitable outcome against a PSA (Pearson Set Assignment). Students will be continually questioned and quizzed on the correct methods, tools and equipment used within a practical setting. Unit 2: Construction In Practice will be based on achieving past PSA (Pearson Ser Assignments).		
Unit 1: Risk Assessment Be able to understand hazards and risks for safe production of a practical construction outcome **12 marks**	**Unit 2: Practical Outcome** Be able to produce a practical construction outcome **12 marks**	**Unit 3: Quality Checks** Be able to produce a practical construction outcome **12 marks**
Home learning		
Students will receive a range of activities; • Worksheets • Investigations • Photography • Sketching		
Feedback		
Creative Industries uses subject specific front sheet to inform students of their learning progress. Feedback for the four distinct Units, Unit 2: Risk Assessment, Unit 2: Practical Outcome and Unit 3: Quality Checks • Safe working practices • Verbal Feedback • Standard Work		

Appendix 1: Brickwork

Project brief – Brickwork

Specification Notes

1. Half brick wall in stretcher bond
2. Main face in type A – facing bricks
3. Decorative feature type B – coloured facing bricks
4. Decorative panel feature (see drawing)
5. Decorative panel to project 15mm
6. Sand lime mortar (to simulate site mix)
7. Main face of walling to be finished in bucket handle jointed finish
8. Decorative panel to be flush jointed finish
9. Rear of wall to be left clean