



Subject:

Module 1

| Overarching Topic: | | | |
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| <p>Why is this topic being studied at this time?</p> <p>How does it fit into the wider subject curriculum?</p> | <p>Students enter the Design Technology department with a sense of excitement and anticipation as they embark upon a new subject in an environment which is alien to them. The students arrive with a very wide range of starting points based on their prior experience of Design Technology at KS1 and KS2. The DT department at RWS has a wide array of tools, equipment and technologies that would not be available to students at other schools, which this project will introduce to the students in a safe and manageable way.</p> <p>The Health & Safety project is the first project that Year 7 students will undertake at RWS; the rationale behind this is to ensure safe working practices are adopted by all students in the department from day one, which will build fundamental life skills for any future activities in hazardous environments.</p> | | |
| | Critical | Core | Pinnacle |
| <p>The Big Questions (What questions will students be able to answer upon mastery of the topic?)</p> | <ul style="list-style-type: none"> ○ What are the non-negotiable workshop rules? ○ What is PPE? ○ What is the appropriate PPE for the workshop machinery available? ○ What is a risk? ○ What is a hazard? ○ What is an exclusion zone? ○ How is the workshop set up with H&S in mind? ○ What are the three key resistant material categories? ○ What is a working drawing? | <ul style="list-style-type: none"> ○ Can you identify hazards posed by specific machines? ○ Can you identify the control measures in place? ○ Can you operate machines with accuracy in a safe way? ○ Can you categorize specific materials based on their working properties? ○ Can you explain why specific materials are suitable for specific applications? ○ Can you improve the safety of a product from home? ○ Can you use a working drawing to plan your practical? How can it be used to mark out? | <ul style="list-style-type: none"> ○ When is safe, safe <u>enough</u>? ○ Could you propose an improved workshop layout with regards to health and safety? ○ What does COSHH stand for? ○ Can you design your own matrix for workshop risk assessments including all variables? ○ Can you ever eliminate <u>all</u> risk within the workshop? ○ How will Brexit impact the UK Health and Safety laws? ○ How can a working drawing be used to evaluate the accuracy of a practical? |

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| The Key Skills/ Techniques | The sophistication and application of skills will become more advanced as students' progress through the critical, core and pinnacle knowledge. | |
| | Skill/Technique | How will this skill be developed? |
| | Hazard Spotting | Tour of the workshop to inspire students of what DT practical is like at RWS and the facilities we have. Highlighting the key dangers of a workshop so that students are capable of identifying and avoiding risks/hazards. |
| | Presentation of workshop layout along with key rules | Students will create their own list of rules to evaluate the likelihood of dangers in the workshop and prioritize the most important rules for being safe in the workshop. |
| | Categorizing materials | Students will learn about the 3 resistant materials: the categories, properties and uses. |
| | Interpreting Working Drawings | Students will learn to read working drawings to create decisions for how they will plan their practical. It will promote accurate use of measuring equipment as well as give students criteria to check their work against. |
| | High quality and accurate keyring which uses 3 resistant materials | Students will apply their material theory to a focus practical to produce a high quality key ring. |