



Design & Technology

Key Stage 3 Framework for Learning

Year 7 2016-2017: Future Foundations

Students in Technology will study (over the course of a single term) a range of skills and topics associated with the specialist area they are visiting. During Year 7 students will visit 2 areas of Technology and will spend 1 cycle of the rotation working within Computing. More rigorous details are available in mid-term planning documents as this framework encompasses all of the Technology KS3 curriculum for year 7.


First 2 weeks

Knowledge	<p>Cosmic Having read the text, students will complete a short design and make task which follows the design process as an introduction to Design and Technology at Chorlton High School. This short unit will focus on the design and development of a rocket, under the guise of an award to claim the winning design from Liam who is set to journey into space.</p>
Skills	<p>Students will follow the design process in order to complete their design and make activities focusing on the following subject skills throughout the unit:</p> <ul style="list-style-type: none"> • Specifications • Design Ideas • Development of designs • Plan of Manufacture • Making • Evaluation <p>Throughout the unit students will be guided through the design process by staff enabling them to glean an initial understanding of the methodology for working as part of the Technology Curriculum.</p>
Assessment	<p>Students will be assessed throughout this piece of work both formatively and summative against the CHS assessment criteria awarded for Design and Technology. Students key assessment points will be for Design and Making activities and their ability to evaluate against the design criteria, or their own design criteria. Opportunities for students to self/peer assess their own work or the work of others will be included as part of the unit of work.</p>
Reward & enrichment	<p>Classroom rewards and opportunities will follow CHS reward criteria for routine points, star of the lesson etc. Student tasks are set under the premise of a design competition. Individual rewards could be used as incentives to engage and enthuse students further in lessons. Enrichment opportunities might come in the form of wider experiences or further research opportunities.</p>
Character	<p>As part of the tasks being completed in lessons there are plenty of opportunities for staff to link the learning in lessons to the CHS Qualities of Success.</p> <ul style="list-style-type: none"> • QoS Curiosity – Specification writing and analysis of tasks. • QoS Creativity – Designing and making products in Technology. • QoS Reflection – Annotating and Evaluating work, and reflecting on work during an ongoing process. • CV Democracy – this could be delivered through the sharing of a voting system to select winning designs which could be commissioned. <i>Use of Ballot Boxes etc.</i>

Autumn 1

Knowledge	<p>Foundation: During this term students will undertake a unit of work which enables them to secure a foundation to which they can build upon the Design and Technology processes, techniques and methodology of working. In each area of Technology students will study a range of topics which relate to the materials or ingredients they are working with, and will follow the design process to enable them to design and make products using both creativity and technical skill. Students will study with a subject focus in Food, Digital Technology, Product Design or Textiles typically responding to a design brief, or a given scenario.</p>
Skills	<p>Foundation/Introduction: Students will undertake a range of tasks and activities in lessons which relate to the area of Technology they are studying. In each area of Technology students will follow the design process and during the course of the topic the following skills will be delivered to students throughout the topic.</p> <p>Research, Investigation and Analysis:</p> <ul style="list-style-type: none"> • Investigate and analysis of existing product. • Seeking inspirations or use of themes (including analysis) <p>Technical Knowledge (Materials, ingredients and processes):</p> <ul style="list-style-type: none"> • Health and Safety in Technology classrooms. • Use of tools and equipment in the classrooms/workshops <p>Design and Development:</p> <ul style="list-style-type: none"> • Producing designs (structure, form, layout and details for inclusion) • Labeling ideas. • Creating specifications.




	<ul style="list-style-type: none"> • Using inspiration to create design ideas. • Annotating ideas <p>Making/Manufacturing Skills:</p> <ul style="list-style-type: none"> • Using appropriate tools and equipment. • Working accurately during manufacturing tasks. • Working accurately during manufacturing tasks. • Working independently throughout practical tasks. <p>Evaluation:</p> <ul style="list-style-type: none"> • Evaluating practical work and skills learnt throughout unit. • Testing and evaluating a product. • Evaluating against original brief/criteria.
Assessment	<p>Students in design and Technology will be assessed throughout their unit of work both formatively and summative against the CHS assessment criteria for Design and Technology.</p> <p>Key areas of assessment for students will be:</p> <ul style="list-style-type: none"> • Research and Investigation • Design and Development • Making • Testing and Evaluation • Communication. <p>This replicates the marking and assessment policy for students at KS4 and will enable students to familiarize themselves with the common assessment periods used throughout the unit.</p> <p>Students will be assessed at the end of the half term and in summary at the end of the term for the unit of work completed. <i>Opportunities for students to self/peer assess their own work or the work of others will be included as part of the unit of work.</i></p> <p>Main classroom assessment tasks which will form the basis of their half termly assessment data will focus on:</p> <ul style="list-style-type: none"> • Research and Investigation • Design and Manufacture • Evaluation
Reward & enrichment	<p>Rewards</p> <p>Classroom rewards and opportunities will follow CHS reward criteria for routine points, star of the lesson etc. Individual rewards could be used as incentives to engage and enthuse students further in lessons. At the end of each half term subject commendations will be awarded to students from each Technology group. Departmental rewards system will hope to develop students reward opportunities in Year 7.</p> <p>Enrichment</p> <p>Enrichment opportunities might come in the form of wider experiences or further research opportunities. Guest speakers or links to industry experts could be used to help develop enrichment opportunities for students.</p>
Character	<p>QoS – Optimism CV - Democracy</p> 


Autumn 2

Knowledge	<p>Foundation:</p> <p>During this term students will undertake a unit of work which enables them to secure a foundation to which they can build upon the Design and Technology processes, techniques and methodology of working. In each area of Technology students will study a range of topics which relate to the materials or ingredients they are working with, and will follow the design process to enable them to design and make products using both creativity and technical skill. Students will study with a subject focus in Food, Digital Technology, Product Design or Textiles typically responding to a design brief, or a given scenario.</p>
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	<p>Design and Development:</p> <ul style="list-style-type: none"> Producing designs (structure, form, layout and details for inclusion) Labeling ideas. Creating specifications. Using inspiration to create design ideas. Annotating ideas <p>Making/Manufacturing Skills:</p> <ul style="list-style-type: none"> Using appropriate tools and equipment. Working accurately during manufacturing tasks. Working accurately during manufacturing tasks. Working independently throughout practical tasks. <p>Evaluation:</p> <ul style="list-style-type: none"> Evaluating practical work and skills learnt throughout unit. Testing and evaluating a product. Evaluating against original brief/criteria.
Assessment	<p>Students in design and Technology will be assessed throughout their unit of work both formatively and summative against the CHS assessment criteria for Design and Technology.</p> <p>Key areas of assessment for students will be:</p> <ul style="list-style-type: none"> Research and Investigation Design and Development Making Testing and Evaluation Communication. <p>This replicates the marking and assessment policy for students at KS4 and will enable students to familiarize themselves with the common assessment periods used throughout the unit.</p> <p>Students will be assessed at the end of the half term and in summary at the end of the term for the unit of work completed. <i>Opportunities for students to self/peer assess their own work or the work of others will be included as part of the unit of work.</i></p> <p>Main classroom assessment tasks which will form the basis of their half termly assessment data will focus on:</p> <ul style="list-style-type: none"> Research and Investigation Design and Manufacture Evaluation
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Character	<p>QofS – Empathy CV – Solidarity, Caring for Others, Equality, Equity</p> 
Spring 1	
Knowledge	<p>Foundation/Development:</p> <p>During this term students will undertake a unit of work which enables them to secure a foundation to which they can build upon the Design and Technology processes, techniques and methodology of working. <i>If students have completed a rotation in Technology they will be focusing on developing skills in Technology.</i></p> <p>In each area of Technology students will study a range of topics which relate to the materials or ingredients they are working with, and will follow the design process to enable them to design and make products using both creativity and technical skill. Students will study with a subject focus in Food, Digital Technology, Product Design or Textiles typically responding to a design brief, or a given scenario.</p>
Skills	<p>Foundation/Introduction or Development of Subject Skills:</p> <p>Students will undertake a range of tasks and activities in lessons which relate to the area of Technology they are studying. In each area of Technology students will follow the design process and during the course of the topic the following skills will be delivered to students throughout the topic.</p>




	<p>Research, Investigation and Analysis:</p> <ul style="list-style-type: none"> Investigate and analysis of existing product. Seeking inspirations or use of themes (including analysis) <p>Technical Knowledge (Materials, ingredients and processes):</p> <ul style="list-style-type: none"> Health and Safety in Technology classrooms. Use of tools and equipment in the classrooms/workshops <p>Design and Development:</p> <ul style="list-style-type: none"> Producing designs (structure, form, layout and details for inclusion) Labeling ideas. Creating specifications. Using inspiration to create design ideas. Annotating ideas <p>Making/Manufacturing Skills:</p> <ul style="list-style-type: none"> Using appropriate tools and equipment. Working accurately during manufacturing tasks. Working accurately during manufacturing tasks. Working independently throughout practical tasks. <p>Evaluation:</p> <ul style="list-style-type: none"> Evaluating practical work and skills learnt throughout unit. Testing and evaluating a product. Evaluating against original brief/criteria.
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Character	<p>QofS – Creativity & Curiosity CV - Openness</p> <div data-bbox="1380 1691 1497 1870" style="float: right; border: 1px solid black; padding: 5px; text-align: center;">  <p>I EXPLORE LIFE, I TAKE A DEEP BREATH, GO FOR IT, AND RESPOND TO IT WITH IMAGINATION.</p> </div>
<h2>Spring 2</h2>	
Knowledge	<p>Foundation/Development:</p> <p>During this term students will undertake a unit of work which enables them to secure a foundation to which they can build upon the Design and Technology processes, techniques and methodology of working.</p>



	<p><i>If students have completed a rotation in Technology they will be focusing on developing skills in Technology.</i></p> <p>In each area of Technology students will study a range of topics which relate to the materials or ingredients they are working with, and will follow the design process to enable them to design and make products using both creativity and technical skill. Students will study with a subject focus in Food, Digital Technology, Product Design or Textiles typically responding to a design brief, or a given scenario.</p>
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Character	<p>QofS – Responsibility & Reflection CV – Honesty & Social Responsibility</p> 
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Summer 1

Knowledge	<p>Development: During this term students will develop their Design and Technology knowledge and understanding of processes, techniques and methodology of working. In each area of Technology students will study a range of topics which relate to the materials or ingredients they are working with, and will follow the design process to enable them to design and make products using both creativity and technical skill. Students will study with a subject focus in Food, Digital Technology, Product Design or Textiles typically responding to a design brief, or a given scenario.</p>
Skills	<p>Development of Subject Skills: Students will undertake a range of tasks and activities in lessons which relate to the area of Technology they are studying. In each area of Technology students will follow the design process and during the course of the topic the following skills will be delivered to students throughout the topic.</p> <p>Research, Investigation and Analysis:</p> <ul style="list-style-type: none"> • Investigate and analysis of existing product. • Seeking inspirations or use of themes (including analysis) <p>Technical Knowledge (Materials, ingredients and processes):</p> <ul style="list-style-type: none"> • Health and Safety in Technology classrooms. • Use of tools and equipment in the classrooms/workshops <p>Design and Development:</p> <ul style="list-style-type: none"> • Producing designs (structure, form, layout and details for inclusion) • Labeling ideas. • Creating specifications. • Using inspiration to create design ideas. • Annotating ideas <p>Making/Manufacturing Skills:</p> <ul style="list-style-type: none"> • Using appropriate tools and equipment. • Working accurately during manufacturing tasks. • Working accurately during manufacturing tasks. • Working independently throughout practical tasks. <p>Evaluation:</p> <ul style="list-style-type: none"> • Evaluating practical work and skills learnt throughout unit. • Testing and evaluating a product. • Evaluating against original brief/criteria.
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	<p>Summative Exam: All students in Year 7 will complete an end of Year exam in Design and Technology which will assess their knowledge and understanding of the design processes they have used throughout the academic year in lessons.</p>
Reward and enrichment	<p>Rewards Classroom rewards and opportunities will follow CHS reward criteria for routine points, star of the lesson etc. Individual rewards could be used as incentives to engage and enthuse students further in lessons. At the end of each half term subject commendations will be awarded to students from each Technology group. Departmental rewards system will hope to develop students reward opportunities in Year 7.</p> <p>Enrichment Enrichment opportunities might come in the form of wider experiences or further research opportunities. Guest speakers or links to industry experts could be used to help develop enrichment opportunities for students.</p>
Character	<p>QoFS – Practice & Resiliency CV – Self-Help</p> 

Summer 2

Knowledge	<p>Development: During this term students will develop their Design and Technology knowledge and understanding of processes, techniques and methodology of working. In each area of Technology students will study a range of topics which relate to the materials or ingredients they are working with, and will follow the design process to enable them to design and make products using both creativity and technical skill. Students will study with a subject focus in Food, Digital Technology, Product Design or Textiles typically responding to a design brief, or a given scenario.</p>
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	<p>Students who have already completed a unit of work in Design and Technology will be assessed with a focus on developing skills and progression from their previous unit of work.</p> <p>Students will be assessed at the end of the half term and in summary at the end of the term for the unit of work completed. Opportunities for students to self/peer assess their own work or the work of others will be included as part of the unit of work.</p> <p>Main classroom assessment tasks which will form the basis of their half termly assessment data will focus on:</p> <ul style="list-style-type: none"> • Research and Investigation • Design and Manufacture • Evaluation <p>Summative Exam: All students in Year 7 will complete an end of Year exam in Design and Technology which will assess their knowledge and understanding of the design processes they have used throughout the academic year in lessons.</p>
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Character	<p>QofS – Motivation CV – Self-Responsibility</p> <div data-bbox="1385 907 1501 1077" style="float: right; text-align: center;"> <p>I WANT THE BEST. I AM THE BEST.</p> </div>