Oak Tree School

Curriculum Intent

Faculty of Technologies

Head Of Faculty: Hayley Martyn & Rachel Lodge

Subjects included: Catering, Graphics, Textiles, Design Technology, IMedia, Computing IT, Young Enterprise.

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Technologies Curriculum Intent

Red Moor School is committed to raising achievement and enabling pupils to recognise their potential. By supporting students through a personalised, engaging curriculum, Red Moor aims to develop the foundation knowledge and skills required to make a manageable and smooth transition to the next life stage. It is important that pupils leave school with an awareness of the wider world and it's past, and the ability to develop and promote the qualities set out in the School ethos: **Friendship & Love, Emotional Resilience, Tolerance & Respect** and to **Always do your best.**

The Technologies broad curriculum provides practical, visual, tactile and sensory experiences in 7 different subject areas: Catering, Design Technology, Graphics, Textiles, Computing, IMedia and Business Studies/ Young Enterprise.

The curriculum encourages students to apply and use their knowledge of Maths, Science, Engineering, English, Humanities and Art to develop their creativity, imagination and problem solving to acquire crucial life/ work skills.

Using a range of different materials, processes and communication methods, pupils are able to design and make products that solve real and relevant problems within a variety of contexts. Working as a team, evaluating work and sharing ideas provides excellent opportunities for students to consider their own and others' needs, wants and values. They are able to apply valued judgements on the aesthetic, economic and moral, social, and cultural impacts a product or idea may have. This can help pupils to develop their **social skills** and show **respect** and **tolerance** towards others and their work.

Pupils are encouraged to take risks in their learning to develop their creativity and understanding of how things work. Consequently students become more **resilient**, innovative, and open to new ideas. Students are able to develop a critical understanding of the impact that Technologies subjects can have on daily life and the wider world.

Pupils are taught crucial life and work skills that enables them to progress socially, **emotionally** and financially. Students develop as commercially minded and enterprising individuals who think critically, drawing on business information and evidence to develop arguments and make justified decisions. The technologies curriculum also ensures that pupils are able to use Information and Communication Technology (ICT) to express themselves and develop their ideas. Through the Technologies curriculum, students are encouraged to reach a suitable level of digital literacy to meet the requirements of a future workplace and feel confident to participate and **do their best** in a digital world of work.

Teaching & Learning In Technologies Subjects

What does excellent teaching and learning look like in the Technologies subjects?

All pupils have equal access to the Technologies curriculum and developmentally appropriate materials. Delivery is differentiated appropriately and students are encouraged to work independently and interpret given design questions to meet their strengths and interests. Materials and lesson content are sensitive to the needs, backgrounds and age of the pupils. Teachers will choose the method that is most appropriate for the student that they are working with in order to meet the objectives of the lesson.
The Technology faculty is committed to providing a fun, engaging and challenging programme of creative education that will benefit all students and in turn encourage pupils to develop an interest and enjoy the Technologies subjects.

How are Technologies subjects taught in the Foundation Curriculum (KS2 & 3)?

KS2 topic based lessons that incorporate a broad understanding of Technologies subjects and KS3 specialised DT, Catering and IT lessons are both offered in the faculties foundation curriculum. Students are taught in small classes dependent on their needs and attainment and lessons are differentiated accordingly. The main emphasis in the foundation curriculum is to develop creativity, resilience, experimentation and ability to problem solve. This allows students to become more open minded to possibilities and acquire the skills needed to critically analyse, innovate and communicate ideas.

AQA UAS, ASDAN and Arts Awards courses are offered throughout the foundation curriculum to prepare students for future qualifications.

How are Technologies subjects taught in the Options Curriculum (KS4)?

Under the Technologies faculty, students are offered a variety of curriculum options: Design Technology: Product Design, Textiles, Graphics, Catering, IT, I Media, Business Studies Young Enterprise.

Students are encouraged to gain external accreditation for their learning from the earliest opportunity. This can be through a range of awarding bodies, such as the AQA Unit Award Schemes, Entry Level and ASDAN Qualifications. The aspirational goal for all students is that they leave with GCSEs, or the highest level of appropriate qualifications they can access, within their areas of interest and ability.

Technologies lessons are taught through a 'personalised curriculum' approach to ensure the content matches each individual student's needs and can be accessed accordingly. Teachers choose most appropriate methods to ensure that each student is reaching and exceeding their individual goals.

How is reading promoted in the Technologies subjects ?

Reading is promoted in every aspect of every Technologies subject. Students are encouraged to read, learn and use appropriate subject specific vocabulary during lessons. When analysing, researching, and evaluating own and others work, reading is essential to develop critical thinking and an understanding of new and existing technologies.

All teachers are aware of each students current reading age and blank level assessment which allow staff to differentiate all teaching and learning resources accordingly.

Measuring Impact in Technologies Subjects

Across all faculties at Red Moor School, staff use an online platform called SOLAR (Special On Line Academic Records) to record student attainment. The Technologies faculty records student progress in all Technologies subjects in RMS Steps on the Technologies framework.

RMS Steps is a method of assessment that covers a broad range of ability. It ranges from the 'Foundation Learning Skills' (FLS) that cover Early Years education, through to the main 'Steps' that cover the KS2 / 3 foundation and KS4 options curriculum. Each of these 'Steps' correspond to an academic year from Year 1 (Step 1) to Year 11 (step 11) with attainment rates similar to that of a mainstream school. Students are expected to complete 80% of the curriculum each year to achieve one 'Step' and progress to the next level of learning. A child who completes all 11 steps will be expected to leave the school with an excellent GCSE grade.

This assessment framework helps to provide staff with additional guidance on how their students are progressing through the Technologies curriculum. It helps staff to build on students prior knowledge so pupils can achieve the best possible outcomes.

The success of students in their Technologies subjects is not only measured through attainment. As a faculty we strive to ensure all students enjoy their learning and develop positive and healthy relationships. Students are supported to socialise well with others and gain the experiences to develop lifelong friendship and love, emotional resilience, tolerance and respect towards others. Red Moor School and the Technologies faculty is fully committed to promoting and providing a Thrive approach to learning.

Skills and Progression

All the knowledge and skills that we would like our leaners to achieve by the end of Year 11 are set out in sequential order on SOLAR. It is our intention to ensure that all children progress at the expected rate so they are able to achieve their personal best.

The Technologies objectives have been broken down in to subjects, then further into appropriate skill categories. These have been ordered in a sequential way and can be seen in progression tables on the following pages.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Research	
Step 1	With help, use IT to find images of a product to make.
Step 1	Ask others what they think of a design idea.
Step 2	Independently use IT to explore design ideas and find images.
Step 2	Research ideas by using different sources.
Step 3	Use a basic paint program to draw a design.
Step 3	Ask others what they think of a final product
Step 4	Use given shapes on a computer program to create a design. a net for packaging.
Step 4	Conduct a basic questionnaire.
Step 5	Use a computer design program to communicate ideas with text and graphics.
Step 5	Compare questionnaire results with that of others.
Step 6	Make simple electric circuits with 1 input and 1 output.
Step 6	Identify improvements to final design from 'questionnaire results'
Step 7	Make more complex electrical circuits with more than 1 output.
Step 7	Create a design brief.
Step 8	Use a computer as a control.
Step 8	Evaluate 2 or more ideas against 'relevant questionnaire data'.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Research	
Step 9	Use computer software to model ideas - CAD and during making - CAM
Step 9	Create a questionnaire to ask targeted audience their views of design ideas and/or final product.
Step 10	Demonstrate an understanding of how new technologies can impact the design and making process.
Step 10	Create own design brief considering needs of users.
Step 11	Demonstrate an understanding of industrial design and making processes.
Step 11	Identify improvements to final design from 'questionnaire results'.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Design	
Step 1	Tell others about a design idea.
Step 1	Create a simple line drawing to explain an idea.
Step 2	Generate and develop ideas through discussion.
Step 2	Create a 2D drawing to explain an idea.
Step 3	Identify and explain what a design brief is.
Step 3	Add simple annotation to a drawing to explain an idea.
Step 4	Use primary and secondary research to develop ideas.
Step 4	Add colour and shading to identify important parts of a design.
Step 5	Use knowledge from previous work or existing products to inspire own designs
Step 5	Develop quick sketching techniques.
Step 6	Consider more than one idea for the same product.
Step 6	Draw using scale.
Step 7	Use drawings to explain and investigate how products will work.
Step 7	Develop design ideas through 3D drawing techniques or cross sectional drawing.
Step 8	Design a product that is functional and for a purpose.
Step 8	Develop design ideas through perspective drawing techniques.
Step 9	Design and research considers aesthetics, form and function.
Step 9	Develop design ideas through exploded diagrams.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Design	
Step 10	Develop a range of product ideas are functional and relate to the design brief.
Step 10	Use graphical techniques in the generation, development, modelling and communication of design proposals.
Step 11	Design a product that appeals to specific individuals or groups and considers social, cultural and environmental issues.
Step 11	Generate and record a range of suitable design proposals.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Develop and Plan	
Step 1	Identify what a model is.
Step 1	Decide with some help how to make a product.
Step 2	Identify parts of a model that are successful / unsuccessful.
Step 2	Independently discuss how to make a product.
Step 3	Make a basic mock up of a design.
Step 3	Discuss what tools or equipment would be needed to make.
Step 4	Explain how the final product will work by using a model to demonstrate.
Step 4	Discuss step by step instructions of the making process.
Step 5	Examine existing products and identify joints, separate parts and moving parts.
Step 5	Draw or write step by step instructions of the making process.
Step 6	Create a prototype of a design and test its suitability.
Step 6	Begin to estimate amount of material required.
Step 7	Evaluate the success of a prototype.
Step 7	Begin to estimate amount of material required with rough measurements.
Step 8	Identify and solve own design problems through model making
Step 8	Use templates to tessellate shapes to cut out with minimum waste.
Step 9	Develop models and prototypes to scale.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Develop and Plan	
Step 9	Plan the order of tasks and processes when making.
Step 10	Construct prototypes by using a range of different techniques and processes.
Step 10	Consider timings when planning.
Step 11	Consider form, function and iterative design (prototype, share, get feedback, refine) when modelling and/or making
Step 11	Manage own work so making processes can be carried out accurately and consistently.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Make	
Step 1	Identify different tools and their uses.
Step 1	Use tape and glue to create temporary joins, fixed joins, & moving joins.
Step 1	Use pencil and pens with some accuracy to add detail to a product
Step 2	Follow instructions when making.
Step 2	Use scissors to cut along straight lines.
Step 2	Use paint with some accuracy to add detail to a product.
Step 3	Name correct tools.
Step 3	Use scissors to cut along curved lines and shapes marked out by a template.
Step 3	Consider what would be the most suitable finish between pencil and pens.
Step 4	Give instructions to someone else to follow when making
Step 4	Use junior hacksaw and G clamp to cut strip wood.
Step 4	Choose important colours/themes for a project with some help.
Step 5	Use workshop tools with help when needed.
Step 5	Measure and cut to a required length accurately in millimetres.
Step 5	Consider the final appearance of the product.
Step 6	Puts tools away safely. Consider the safety of others when working.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Make	
Step 6	Use a coping saw and vice to cut curved shapes.
Step 6	Apply appropriate decoration.
Step 7	Identify different ways of joining materials
Step 7	Drill a hole.
Step 7	Apply decoration to enhance the finish.
Step 8	Know the purpose of different adhesives.
Step 8	Drill a hole that only goes part way through material.
Step 8	Identify an appropriate method of finishing product.
Step 9	Create simple joins between two pieces of wood. e.g. Butt joint, dowel joint.
Step 9	Cut internal shapes.
Step 9	Demonstrate good understanding of the colour wheel and of contrasting and complimentary colours.
Step 10	Use most appropriate joint for a design.
Step 10	Cut material to a desired length with good accuracy.
Step 10	Demonstrate a good understanding of COSHH and safe practice with chemicals.
Step 11	Work with a range of tools and fully understand their characteristics.
Step 11	Cut, measure and join materials accurately and with a good level of skill.
Step 11	Consider aesthetics and ergonomics of a product.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Evaluate	
Step 1	Say what processes and equipment was used.
Step 1	Evaluate how well a product meets the given design criteria.
Step 2	Evaluate by saying what I like and dislike about what I made.
Step 2	Evaluate own work against own criteria.
Step 3	Listen to others opinions and make improvements when making .
Step 3	Collect feedback from others to find out how to improve the product.
Step 4	Evaluation - With some help I can say if I like, dislike the colours/themes I said I was going to use.
Step 4	Investigate well known designers and inventors and their work.
Step 5	Suggest some areas of own work that could be improved.
Step 5	Explain strengths and weaknesses of existing products.
Step 6	Evaluate likes and dislikes of an existing product/object.
Step 6	Evaluate existing products in relation to their purpose and audience
Step 7	Make simple risk analysis when selecting tools and processes
Step 7	Analyse the work of past and present professionals and others to develop and broaden understanding
Step 8	Explain any changes made when making and designing.
Step 8	Evaluate how materials, tools, equipment and processes have been used.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Evaluate	
Step 9	Check 'making' while it is happening and Identify solutions if problems occur.
Step 9	Investigates new technologies.
Step 10	Demonstrate a good understanding of iterative process. (prototype, share, feedback, refine).
Step 10	Create and evaluate a plan of work in order to make the product. Select appropriate materials, tools, equipment and processes
Step 11	Discuss how well their outcome meets their design brief.
Step 11	Test, evaluate and refine ideas and products against a specification, taking into account the views of intended users.

Skills and Progression 'snap-shot'

SOLAR: Design Technology – Technical Knowledge	
Step 1	Can describe the movement of an object - Up, Down, Backwards, Round and Round, Quick, Slow
Step 1	Understand the term recyclable.
Step 2	Identify moving parts of a product.
Step 2	Give examples of materials that can be recycled.
Step 3	I can start to explain how something will work.
Step 3	Develop an idea and create a product from recycled materials.
Step 4	Can describe how simple movement works - Wheels go round and round - Push hard for - Quick - Push lightly for - Slow.
Step 4	Identify cultural differences.
Step 5	Understands how mechanical systems can be used in products to enable changes in movement and force.
Step 5	Develop a product considering cultural influences.
Step 6	Use mechanical systems in a product to enable changes in movement.
Step 6	Explain the difference between renewable and non renewable energy and fossil fuels.
Step 7	Use and understand the properties of materials to achieve functioning solutions.
Step 7	Develop a product that uses sustainable energy.

Skills and Progression ‘snap-shot’

SOLAR: Design Technology – Technical Knowledge	
Step 8	Apply computing and use electronics to embed intelligence in products that respond to inputs (e.g. sensors), and control outputs (e.g. actuators, using programmable components (e.g. microcontrollers)
Step 8	When making consider the 6Rs - Reduce. - Rethink. - Refuse. - Recycle. - Reuse. - Repair.
Step 9	Use appropriate vocabulary to describe designs and production.
Step 9	Understand the term sustainable design and give examples.
Step 10	Know what production methods are called and quantities they produce. - (One off production. - Batch production. - Continuous production.)
Step 10	When making consider the environmental impact of design.
Step 11	Identify how methods used in GCSE making could be replicated in industry.
Step 11	Research considers environmental / cultural issues and social influences.

Skills and Progression ‘snap-shot’

SOLAR: Graphics – Research	
Step 5	Use a computer design program to communicate ideas with text and graphics.
Step 5	Compare questionnaire results with that of others.
Step 6	Independently select and find information relevant to a brief.
Step 6	Identify improvements to final design from 'questionnaire results'
Step 7	Research and record visual and other information from primary and secondary sources in response to a brief.
Step 7	Create a design brief.
Step 8	Use digital and/or non-digital photography, hand rendered working methods and digital working methods.
Step 8	Evaluate 2 or more ideas against 'relevant questionnaire data'.
Step 9	Use computer software to model ideas - CAD and during making - CAM
Step 9	Create a questionnaire to ask targeted audience their views of design ideas and/or final product.
Step 10	Demonstrate an understanding of how new technologies can impact the design and making process.
Step 10	Create own design brief considering needs of users.
Step 11	Demonstrate an understanding of industrial design and making processes.
Step 11	Identify improvements to final design from 'questionnaire results'.

Skills and Progression 'snap-shot'

SOLAR: Graphics – Design	
Step 5	Use knowledge from previous work or existing products to inspire own designs
Step 5	Develop quick sketching techniques.
Step 6	Consider more than one idea for the same product.
Step 6	Draw using scale.
Step 7	Use drawings to explain and investigate how products will work.
Step 7	Develop design ideas through 3D drawing techniques or cross sectional drawing.
Step 8	Design a product that is functional and for a purpose.
Step 8	Develop design ideas through perspective drawing techniques.
Step 9	Design and research considers aesthetics, form and function.
Step 9	Develop design ideas through exploded diagrams.
Step 10	Develop a range of product ideas are functional and relate to the design brief.
Step 10	Use graphical techniques in the generation, development, modelling and communication of design proposals.
Step 11	Design a product that appeals to specific individuals or groups and considers social, cultural and environmental issues.
Step 11	Generate and record a range of suitable design proposals.

Skills and Progression 'snap-shot'

SOLAR: Graphics – Develop and Plan	
Step 5	Examine existing products and identify the tools and techniques in the making process.
Step 5	Draw or write step by step instructions of the making process.
Step 6	Create a prototype of a design and test its suitability.
Step 6	Begin to estimate amount of material required.
Step 7	Evaluate the success of a prototype.
Step 7	Begin to estimate amount of material required with rough measurements.
Step 8	Identify and solve own design problems through model making
Step 8	Develop a relationship and sense of purpose between materials, ideas and potential outcomes.
Step 9	Develop models and prototypes to scale.
Step 9	Plan the order of tasks and processes when making.
Step 10	Construct prototypes by using a range of different techniques and processes.
Step 10	Consider timings when planning.
Step 11	Consider form, function and iterative design (prototype, share, get feedback, refine) when modelling and/or making
Step 11	Manage own work so making processes can be carried out accurately and consistently.

Skills and Progression 'snap-shot'

SOLAR: Graphics – Make	
Step 5	Use specialist equipment with help when needed.
Step 5	Be able to communicate design ideas using 2D mark making techniques.
Step 5	Consider the final appearance of the product.
Step 6	Puts tools away safely. Consider the safety of others when working.
Step 6	Demonstrate the use of appropriate media and materials such as pencil, pen and ink, pen and wash, crayon, watercolour, gouache and acrylic paint, printmaking.
Step 6	Apply appropriate decoration.
Step 7	Identify appropriate techniques and materials to create a suitable outcome.
Step 7	Understand and demonstrate the difference between abstract and naturalistic.
Step 7	Apply decoration to enhance the finish.
Step 8	Know the purpose of different adhesives.
Step 8	Understand and demonstrate expression, exaggeration and imaginative interpretation in own work.
Step 8	Identify an appropriate method of finishing product.
Step 9	Experiment with different media, materials, techniques and processes.
Step 9	Understand and demonstrate the use of visual and tactile elements, such as: colour, line, form, tone, texture, shape, structure, surface.

Skills and Progression 'snap-shot'

SOLAR: Graphics – Make	
Step 9	Demonstrate good understanding of the colour wheel and of contrasting and complimentary colours.
Step 10	Experiment in depth with a range of unique media, materials, techniques and processes.
Step 10	Demonstrate the use of appropriate graphic communication techniques and processes, such as typography and illustration.
Step 10	Demonstrate a good understanding of COSHH and safe practice with chemicals.
Step 11	Demonstrate in detail how outcomes link to design brief, research, existing art work and target audience.
Step 11	Understand and demonstrate the use of presentation and layout techniques such as, composition, scale and spacing.
Step 11	Consider aesthetics and ergonomics of a product.

Skills and Progression 'snap-shot'

SOLAR: Graphics – Evaluate	
Step 5	Suggest some areas of own work that could be improved.
Step 5	Explain strengths and weaknesses of existing products.
Step 6	Evaluate likes and dislikes of an existing product/object.
Step 6	Evaluate existing products in relation to their purpose and audience
Step 7	Make simple risk analysis when selecting tools and processes
Step 7	Analyse the work of past and present professionals and others to develop and broaden understanding
Step 8	Explain any changes made when making and designing.
Step 8	Evaluate how materials, tools, equipment and processes have been used.
Step 9	Check 'making' while it is happening and Identify solutions if problems occur.
Step 9	Investigates new technologies.
Step 10	Demonstrate a good understanding of iterative process. (prototype, share, feedback, refine).
Step 10	Create and evaluate a plan of work in order to make the product. Select appropriate materials, tools, equipment and processes
Step 11	Discuss how well their outcome meets their design brief.
Step 11	Test, evaluate and refine ideas and products against a specification, taking into account the views of intended users.

Skills and Progression 'snap-shot'

SOLAR: Graphics – Technical Knowledge	
Step 5	Demonstrate an understanding of the importance of target audiences and design briefs.
Step 5	Develop a product considering cultural influences.
Step 6	Know and identify the different popular standardised sizes and weights of paper, card and board.
Step 6	Explain the difference between renewable and non renewable energy and fossil fuels.
Step 7	Use and understand the properties of materials to achieve functioning solutions.
Step 7	Develop a product that considers or responds to sustainable energy.
Step 8	Understands the different forms of representation, brand identity, intended message, target audience and working within parameters determined by client and/or audience expectations and requirements
Step 8	When making consider the 6Rs - Reduce. - Rethink. - Refuse. - Recycle. - Reuse. - Repair.
Step 9	Use appropriate vocabulary to describe designs and production.
Step 9	Understand the term sustainable design and give examples.
Step 10	Know what production methods are called and quantities they produce. - (One off production. - Batch production. - Continuous production.)
Step 10	When making consider the environmental impact of design.
Step 11	Identify how methods used in GCSE making could be replicated in industry.
Step 11	Research considers environmental / cultural issues and social influences.

Skills and Progression 'snap-shot'

SOLAR: Textiles – Research	
Step 5	Use a computer design program to communicate ideas with text and graphics.
Step 5	Compare questionnaire results with that of others.
Step 6	Independently select and find information relevant to a textiles brief.
Step 6	Identify improvements to final design from 'questionnaire results'
Step 7	Research and record visual and other information from primary and secondary sources in response to a brief.
Step 7	Create a design brief.
Step 8	Use digital and/or non-digital photography, hand rendered working methods and digital working methods.
Step 8	Evaluate 2 or more ideas against 'relevant questionnaire data'.
Step 9	Use computer software to model ideas - CAD and during making - CAM
Step 9	Create a questionnaire to ask targeted audience their views of design ideas and/or final product.
Step 10	Demonstrate an understanding of how new technologies can impact the design and making process.
Step 10	Create own design brief considering needs of users.
Step 11	Demonstrate an understanding of industrial design and making processes.
Step 11	Identify improvements to final design from 'questionnaire results'.

Skills and Progression 'snap-shot'

SOLAR: Textiles – Design	
Step 5	Use knowledge from previous work or existing products to inspire own designs
Step 5	Develop quick sketching techniques.
Step 6	Consider more than one idea for the same product.
Step 6	Draw using scale.
Step 7	Use drawings to explain and investigate how products will work.
Step 7	Develop design ideas through 3D drawing techniques or cross sectional drawing.
Step 8	Design a product that is functional and for a purpose.
Step 8	Develop design ideas through perspective drawing techniques.
Step 9	Design and research considers aesthetics, form and function.
Step 9	Develop design ideas through exploded diagrams.
Step 10	Develop a range of product ideas are functional and relate to the design brief.
Step 10	Use graphical techniques in the generation, development, modelling and communication of design proposals.
Step 11	Design a product that appeals to specific individuals or groups and considers social, cultural and environmental issues.
Step 11	Generate and record a range of suitable design proposals.

Skills and Progression 'snap-shot'

SOLAR: Textiles – Develop and Plan	
Step 5	Examine existing products and identify the tools and techniques in the making process.
Step 5	Draw or write step by step instructions of the making process.
Step 6	Create a prototype of a design and test its suitability.
Step 6	Begin to estimate amount of material required.
Step 7	Evaluate the success of a prototype.
Step 7	Begin to estimate amount of material required with rough measurements.
Step 8	Identify and solve own design problems through model making
Step 8	Develop a relationship and sense of purpose between materials, ideas and potential outcomes.
Step 9	Develop models and prototypes to scale.
Step 9	Plan the order of tasks and processes when making.
Step 10	Construct prototypes by using a range of different techniques and processes.
Step 10	Consider timings when planning.
Step 11	Consider form, function and iterative design (prototype, share, get feedback, refine) when modelling and/or making
Step 11	Manage own work so making processes can be carried out accurately and consistently.

Skills and Progression 'snap-shot'

SOLAR: Textiles – Make	
Step 5	Use specialist textiles equipment with help when needed.
Step 5	Be able to communicate design ideas using 2D mark making techniques.
Step 5	Consider the final appearance of the product.
Step 6	Puts tools away safely. Consider the safety of others when working.
Step 6	Demonstrate the use of appropriate materials such as pencil, pen, paint crayon, watercolour.
Step 6	Apply appropriate decoration.
Step 7	Identify appropriate textile techniques and materials to create a suitable outcome.
Step 7	Experiment with textile processes such as batik, screen printing, block printing .
Step 7	Apply decoration to enhance the finish.
Step 8	Know the purpose of different adhesives.
Step 8	Use pattern drafting, cutting and tessellating processes to create own textile patterns.
Step 8	Identify an appropriate method of finishing product.
Step 9	Experiment with different fabric, media, techniques and processes.
Step 9	Understand and demonstrate the use of visual and tactile elements, such as: colour, line, form, tone, texture, shape, structure, surface.

Skills and Progression 'snap-shot'

SOLAR: Textiles – Make	
Step 9	Demonstrate good understanding of the colour wheel and of contrasting and complimentary colours.
Step 10	Experiment in depth with a range of textile fabric, media, techniques and processes.
Step 10	Work creatively with appropriate textiles techniques such as: weaving, embroidery (machine or hand), knitting and appliqué and collage.
Step 10	Demonstrate a good understanding of COSHH and safe practice with chemicals.
Step 11	Demonstrate in detail how outcomes link to design brief, research, existing art work and target audience.
Step 11	Understand and demonstrate the use of presentation and layout techniques such as, composition, scale and spacing.
Step 11	Consider aesthetics and ergonomics of a product.

Skills and Progression 'snap-shot'

SOLAR: Textiles – Evaluate	
Step 5	Suggest some areas of own work that could be improved.
Step 5	Explain strengths and weaknesses of existing products.
Step 6	Evaluate likes and dislikes of an existing product/object.
Step 6	Evaluate existing products in relation to their purpose and audience
Step 7	Make simple risk analysis when selecting tools and processes
Step 7	Analyse the work of past and present professionals and others to develop and broaden understanding
Step 8	Explain any changes made when making and designing.
Step 8	Evaluate how materials, tools, equipment and processes have been used.
Step 9	Check 'making' while it is happening and Identify solutions if problems occur.
Step 9	Investigates new technologies.
Step 10	Demonstrate a good understanding of iterative process. (prototype, share, feedback, refine).
Step 10	Create and evaluate a plan of work in order to make the product. Select appropriate materials, tools, equipment and processes
Step 11	Discuss how well their outcome meets their design brief.
Step 11	Test, evaluate and refine ideas and products against a specification, taking into account the views of intended users.

Skills and Progression 'snap-shot'

SOLAR: Textiles – Technical Knowledge	
Step 5	Demonstrate an understanding of the importance of target audiences and design briefs.
Step 5	Develop a product considering cultural influences.
Step 6	Know and identify a range of different stiches and fabric joining processes.
Step 6	Explain the difference between renewable and non renewable energy and fossil fuels.
Step 7	Use and understand the properties of materials to achieve functioning solutions.
Step 7	Develop a product that considers or responds to sustainable energy.
Step 8	Understands the different forms of representation, brand identity, intended message, target audience and working within parameters determined by client and/or audience expectations and requirements
Step 8	When making consider the 6Rs - Reduce. - Rethink. - Refuse. - Recycle. - Reuse. - Repair.
Step 9	Use appropriate vocabulary to describe designs and production.
Step 9	Understand the term sustainable design and give examples.
Step 10	Know what production methods are called and quantities they produce. - (One off production. - Batch production. - Continuous production.)
Step 10	When making consider the environmental impact of design.
Step 11	Identify how methods used in GCSE making could be replicated in industry.
Step 11	Research considers environmental / cultural issues and social influences.

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Problem Solving	
Step 7	I know what is meant by a problem
Step 7	I can recognise potential problems in a task and understand why they have happened
Step 7	I understand how a potential problem may affect the overall outcome
Step 8	I know how to select relevant information to help with problem solving, e.g. prioritising, highlighting, etc.
Step 8	I can explain potential problems to others
Step 8	I understand when I or others may need support to identify or solve a problem
Step 9	I know what information about problems needs to be shared with peers
Step 9	I can explore problems and solutions with peers, e.g. through discussion, research, peer review, etc.
Step 9	I understand how to work collaboratively with others to explore problems and solutions
Step 10	I know how to recognise when circumstances may affect the types of problems that can arise
Step 10	I can adapt my approach in situations where problems arise
Step 10	I understand how I can influence outcomes when problems arise
Step 11	I can begin to suggest solutions to a variety of problems
Step 11	I am able to support others with their problem solving
Step 11	I recognise appropriate tools required for problem solving, e.g. using appropriate IT, through discussion, etc.

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Communication	
Step 7	I know the different ways in which people communicate, e.g. speaking, listening, writing, through body language, etc.
Step 7	I can explain the different forms and uses of communication, e.g. informing, explaining, describing, etc.
Step 7	I recognise why communication skills benefit all of us
Step 8	I know how to explain the tools used in communicating
Step 8	I can choose relevant communication tools for particular situations
Step 8	I can choose appropriate information to share
Step 9	I know how to recognise when a tool or communication skill is appropriate to use
Step 9	I can communicate with a range of people including adults/ business people
Step 9	I enhance communication by using a range of tools e.g. defining, explaining, enhancing
Step 10	I know when and how to communicate different types of information and be confident in doing so
Step 10	I can communicate ideas in an appropriate manner
Step 10	I can recognise how I enhance communication using appropriate tools
Step 11	I know how to highlight the need for skills around communication
Step 11	I can evidence communication skill development
Step 11	I adapt to different situations requiring communication

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Teamwork	
Step 7	I know what makes a team, e.g. shared ethos, clearly defined roles, etc.
Step 7	I can be an active member of a team
Step 7	I understand why being in a team is a benefit
Step 8	I know how different people work together to make a good team
Step 8	I can work with a range of people including adults
Step 8	I use my skills to benefit the team
Step 9	I know how to achieve a desired outcome using the strengths of a team
Step 9	I can utilise other peoples' ideas in a task
Step 9	I share my ideas confidently and appropriately with other team members
Step 10	I know how to describe the benefits of working as a team
Step 10	I can lead by example
Step 10	I recognise the need for strong communication in a team
Step 11	I know the skills needed to be a good leader
Step 11	I can recognise others skills and use them/learn from them
Step 11	I understand how learning from others enhances my own future opportunities

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Resilience	
Step 7	I know what resilience is
Step 7	I can talk positively about how wellbeing may be maintained
Step 7	I am able to highlight my strengths
Step 8	I understand why resilience is important
Step 8	I can tell positive stories about wellbeing from family/ media/friends
Step 8	I understand how others may affect my wellbeing
Step 9	I know how to recognise when support is needed for myself and others
Step 9	I can describe how an individual/team has made things happen
Step 9	I understand how communicating can benefit me
Step 10	I know how to recognise barriers, e.g. time constraints, inadequate resources, etc.
Step 10	I can overcome barriers, e.g. through perseverance, motivation, thinking laterally, etc.
Step 10	I understand how barriers can affect me
Step 11	I know how barriers can affect outcomes
Step 11	I can support others in overcoming barriers
Step 11	I recognise why it is important to communicate when dealing with barriers

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Confidence	
Step 7	I know what it means to be confident
Step 7	I can describe my personality, strengths and preferences
Step 7	I recognise my weaknesses
Step 8	I know the difference between strengths and weaknesses
Step 8	I can evidence use of highlighted strengths
Step 8	I can describe development opportunities, e.g. gaining a different skill, shadowing
Step 9	I understand the need for skill development
Step 9	I can recognise what is important in learning experiences
Step 9	I am able to describe both positives and negatives of learning experiences
Step 10	I know how to assess changes in learning/experiences
Step 10	I can match skills to those needed during experience
Step 10	I describe my skill development needs
Step 11	I know how to recognise what a positive learning environment looks like
Step 11	I can use skills to help create a positive learning environment for others
Step 11	I understand how positivity enhances confidence

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Initiative	
Step 7	I know that instructions are given for a reason
Step 7	I can take instructions
Step 7	I recognise why instructions can benefit a team
Step 8	I know how to explain the reasoning behind instructions
Step 8	I can interpret instructions and explain them in my own words
Step 8	I confidently explain instructions
Step 9	I know how to recognise the need for others' input
Step 9	I can take instructions and enhance them with my own ideas
Step 9	I work with others to create a plan
Step 10	I know how to research ways to deliver outcomes on a task
Step 10	I can work on my own initiative to achieve outcomes
Step 10	I appreciate appropriate times to show initiative
Step 11	I know how to adapt to the needs of others
Step 11	I can support peers to move themselves forward
Step 11	I evidence how supporting others enhances learning

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Organisation	
Step 7	I know what it means to be organised
Step 7	I can prioritise tasks to suit the needs of the team/situation
Step 7	I understand how being organised benefits me and others
Step 8	I know how to describe the needs of an organised team
Step 8	I can plan ahead to undertake given tasks
Step 8	I support others to achieve tasks in an organised manner
Step 9	I know how to describe how an action plan is developed
Step 9	I can evidence action plans
Step 9	I recognise the tools used to develop an action plan
Step 10	I know how to organise a team
Step 10	I can organise myself and others to achieve a task
Step 10	I recognise how working as a team can enhance a task
Step 11	I know how to evaluate a task
Step 11	I can evaluate tasks and review planning
Step 11	I recognise how reviewing planning can benefit learning

Skills and Progression 'snap-shot'

SOLAR: Young Enterprise – Creativity	
Step 7	I know how to describe what it means to be creative
Step 7	I can use resources in a creative way
Step 7	I recognise my own creative abilities
Step 8	I know how to follow instructions to create something
Step 8	I can action another's ideas
Step 8	I recognise others' creative abilities
Step 9	I know how to research a concept to give a basis for ideas
Step 9	I can develop original ideas
Step 9	I am able to explain the need for creativity in learning outcomes
Step 10	I know how to describe different ways of doing things to reach the same outcome
Step 10	I can action a task using different skills and tools
Step 10	I recognise why using my own ideas is important
Step 11	I know how to review and revise an idea to ensure creativity
Step 11	I can undertake a project using my own ideas
Step 11	I understand how to use my creativity to enhance a task

Skills and Progression 'snap-shot'

SOLAR: Catering – Design	
Step 1	Tell others about a design idea.
Step 1	Create a simple line drawing to explain an idea.
Step 2	Generate and develop ideas through discussion.
Step 2	Create a 2D drawing to explain an idea.
Step 3	Identify and explain what a design brief is.
Step 3	Add simple annotation to a drawing to explain an idea.
Step 4	Use primary and secondary research to develop ideas.
Step 4	Add colour and shading to identify important parts of a design.
Step 5	Use knowledge from previous work or existing products to inspire own designs
Step 5	Develop quick sketching techniques.
Step 6	Consider more than one idea for the same product.
Step 6	Draw using scale.
Step 7	Use drawings to explain and investigate how products will work.
Step 7	Develop design ideas through 3D drawing techniques or cross sectional drawing.
Step 8	Design a product that is functional and for a purpose.
Step 8	Develop design ideas through perspective drawing techniques.
Step 9	Design and research considers aesthetics, form and function.
Step 9	Develop design ideas through exploded diagrams.

Skills and Progression ‘snap-shot’

SOLAR: Catering – Design	
Step 10	Develop a range of product ideas are functional and relate to the design brief.
Step 10	Use graphical techniques in the generation, development, modelling and communication of design proposals.
Step 11	Design a product that appeals to specific individuals or groups and considers social, cultural and environmental issues.
Step 11	Generate and record a range of suitable design proposals.

Skills and Progression ‘snap-shot’

SOLAR: Catering – Research	
Step 1	Ask others what they think of a design idea.
Step 2	Research ideas by using different sources.
Step 3	Ask others what they think of a final product
Step 4	Conduct a basic questionnaire.
Step 5	Compare questionnaire results with that of others.
Step 6	Identify improvements to final design from 'questionnaire results'
Step 7	Create a design brief.
Step 8	Evaluate 2 or more ideas against 'relevant questionnaire data'.
Step 9	Create a questionnaire to ask targeted audience their views of design ideas and/or final product.
Step 10	Create own design brief considering needs of users.
Step 11	Identify improvements to final design from 'questionnaire results'.

Skills and Progression 'snap-shot'

SOLAR: Catering – Make	
Step 1	Identify different ingredients.
Step 1	Read a simple scale to measure and weigh out ingredients.
Step 1	Decide with some help how to make a product.
Step 1	Use decoration / garnish with some accuracy to add detail to a product.
Step 2	Follow instructions when making.
Step 2	Understand the value of passing on information about home cooking.
Step 2	Independently discuss how to make a product.
Step 2	Use colour with some accuracy to add detail to a product.
Step 3	Name correct ingredients.
Step 3	Select and prepare ingredients for a recipe.
Step 3	Discuss what ingredients or equipment would be needed to make.
Step 3	Consider what would be the most suitable decoration.
Step 4	Give instructions to someone else to follow when making
Step 4	Use the right tools to slice, mix, spread, bake and knead.
Step 4	Discuss step by step instructions of the making process.
Step 4	Choose important colours/themes for a project with some help.
Step 5	Use appropriate equipment with help.
Step 5	Measure ingredients accurately.

Skills and Progression 'snap-shot'

SOLAR: Catering – Make	
Step 5	Draw or write step by step instructions of the making process.
Step 5	Consider the final appearance of the product.
Step 6	Use equipment safely. Consider the safety of others when working.
Step 6	Understand the importance of personal hygiene while making and keeping work areas clean and hygienic.
Step 6	Begin to estimate what ingredients are required.
Step 6	Apply appropriate decoration.
Step 7	Identify different ways of cutting food.
Step 7	Use the right tools to peel, cut, grate food.
Step 7	Begin to estimate amount of ingredients required considering units of measure.
Step 7	Apply decoration to enhance the finish.
Step 8	Know the purpose of different cutting methods and apply them when making.
Step 8	Present food hygienically.
Step 8	Use templates to tessellate shapes to cut out with minimum waste.
Step 8	Identify an appropriate method of finishing/ decorating a product.
Step 9	Identify different ways of cooking food.
Step 9	Apply presentation skills when serving.

Skills and Progression 'snap-shot'

SOLAR: Catering – Make	
Step 9	Plan the order of tasks and processes when making.
Step 9	Demonstrate good understanding of contrasting and complimentary colours and foods to add as decoration.
Step 10	Use the most appropriate cutting, mixing, cooking method when making.
Step 10	Consider: appearance, smell, cost, taste, nutritional value Complete a sensory graph to record results.
Step 10	Consider timings when planning.
Step 10	Demonstrate a good understanding of COSHH and safe practice with chemicals.
Step 11	Work with a range of ingredients and fully understand their characteristics.
Step 11	Understand how to cook economically and work to a budget.
Step 11	Manage own work so making processes can be carried out accurately and consistently
Step 11	Consider aesthetics and ergonomics of a product.

Skills and Progression 'snap-shot'

SOLAR: Catering – Evaluate	
Step 1	Say what processes and equipment was used.
Step 1	Evaluate how well a product meets the given design criteria.
Step 2	Evaluate by saying what I like and dislike about what I made.
Step 2	Evaluate own work against own criteria.
Step 3	Listen to others opinions and make improvements when making.
Step 3	Collect feedback from others to find out how to improve the product.
Step 4	Evaluation - With some help I can say if I like, dislike the colours/themes I said I was going to use.
Step 4	Investigate well known designers and inventors and their work.
Step 5	Suggest some areas of own work that could be improved.
Step 5	Explain strengths and weaknesses of existing products.
Step 6	Evaluate likes and dislikes of an existing product/object.
Step 6	Evaluate existing products in relation to their purpose and audience.
Step 7	Make simple risk analysis when selecting tools and processes.
Step 7	Analyse the work of past and present professionals and others to develop and broaden understanding.
Step 8	Explain any changes made when making and designing.
Step 8	Evaluate how materials, tools, equipment and processes have been used.

Skills and Progression 'snap-shot'

SOLAR: Catering – Evaluate	
Step 9	Check 'making' while it is happening and Identify solutions if problems occur.
Step 9	Investigates new technologies.
Step 10	Demonstrate a good understanding of iterative process. (prototype, share, feedback, refine).
Step 10	Create and evaluate a plan of work in order to make the product. Select appropriate materials, tools, equipment and processes.
Step 11	Discuss how well their outcome meets their design brief.
Step 11	Test, evaluate and refine ideas and products against a specification, taking into account the views of intended users.

Skills and Progression 'snap-shot'

SOLAR: Catering – Technical Knowledge	
Step 1	Identify some foods are good and bad for your health.
Step 1	Identify sweet and savoury foods.
Step 1	Understands that food comes from plants and animals and has to be farmed, grown or caught.
Step 1	Understand the term recyclable.
Step 2	Identify a range of healthy foods and junk foods.
Step 2	Name foods from each section of the Eat Well plate and understands they should eat at least 5 portions of fruit and veg each day
Step 2	Understand that different foods are produced in different areas of the world.
Step 2	Give examples of ingredients that can be recycled and re-used.
Step 3	Know some of the benefits of fruit and vegetables.
Step 3	Explain why the Eat Well plate is an important tool.
Step 3	Understand that food is processed into different ingredients e.g. Milk into butter.
Step 3	Develop an idea and create a product from 're-used / left-over ingredients.
Step 4	Can describe how simple movement works - Wheels go round and round - Push hard for - Quick - Push lightly for - Slow.
Step 4	Identify cultural differences.
Step 4	Explain what a food product will do when being made.
Step 4	Understand all sections of the Eat Well plate and why they differ in size.

Skills and Progression 'snap-shot'

SOLAR: Catering – Technical Knowledge	
Step 5	Compare changes that occur due to cooking.
Step 5	Consider the effect of varying food ingredients.
Step 5	Understand the source, seasonality and characteristics of a broad range of ingredients.
Step 5	Develop a product considering cultural influences.
Step 6	Know that different foods combine to create different tastes.
Step 6	Understand what different affects food types have on the body. e.g. The impact of eating too much sugar.
Step 6	Use awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using his/her own recipes.
Step 6	Explain the difference between renewable and non renewable energy and fossil fuels.
Step 7	Know a varied diet is required to remain healthy.
Step 7	Identify the components of a balanced diet.
Step 7	Use and understand the properties of ingredients to achieve functioning solutions.
Step 7	Develop a product that considers food waste.
Step 8	Be aware of how to store food correctly.
Step 8	Understand and apply the principles of nutrition and health.
Step 8	Using the Internet, investigate the food traffic light system and produce a poster explaining what it is.
Step 8	When making consider the 6Rs - Reduce. - Rethink. - Refuse. - Recycle. - Reuse. - Repair.

Skills and Progression 'snap-shot'

SOLAR: Catering – Technical Knowledge	
Step 9	Identify risks and solutions with equipment.
Step 9	Understand and apply the principles of nutrition and health.
Step 9	Use appropriate vocabulary to describe designs and production.
Step 9	Understand the term sustainable design and give examples.
Step 10	Identify the importance of the following nutrients: Vitamins A, B, C & D, Calcium, Iron, Sodium, Dietary fibre, Water and their benefits to the body and give examples of foods where each can be found.
Step 10	Discuss the term 'a healthy diet'. Consider Government guidelines, recommended daily amounts (RD) and nutritional labels on food packaging.
Step 10	Know what production methods are called and quantities they produce. - (One off production. - Batch production. - Continuous production.)
Step 10	When making consider the environmental impact of design.
Step 11	Select and prepare ingredients for recipes for a nutritious, two-course meal.
Step 11	Be able to pass on information about cooking meals at home from scratch.
Step 11	Identify how methods used in GCSE / BTEC making could be replicated in industry.
Step 11	Research considers environmental / cultural issues and social influences.

Skills and Progression 'snap-shot'

SOLAR: Computing—Plan and Present	
Step 1	Explain actions when adding special effects eg. colour/sound/text.
Step 2	Edit work using different functions.
Step 3	Use simple editing and formatting techniques.
Step 4	Order a collection of pictures into the correct sequence.
Step 5	Apply editing, formatting and layout techniques to meet needs, including text, tables, graphics, records, numbers, charts, graphs or other digital content.
Step 6	Use ICT to generate, develop, organise and present my work and understand the need for quality in my presentations.
Step 7	Use ICT to present information in different forms and show I am aware of my intended audience. (Graphs, pictures, text and sound).
Step 8	Adapt work which will be seen by others and design things with specific reasons and people in mind.
Step 9	Independently plan work creating a portfolio of digital evidence of their learning.
Step 10	Apply a range of editing, formatting and layout techniques to meet needs, including text, tables, graphics, records, numerical data, charts, graphs or other digital content.
Step 11	Display numerical data in appropriate graphical format.

Skills and Progression 'snap-shot'

SOLAR: Computing—Research	
Step 1	Find similar information in different formats. Eg. Newspaper /website /books/TV.
Step 1	Observe photos being taken and take own digital photos.
Step 2	State what the different formats are and independently review and discuss them.
Step 2	Understand the different programs/software making it able to search for information (Explorer/google).
Step 3	Show that different information can be found in different forms on a computer.
Step 3	Look up and use information from various places (cd, web pages and printed documents).
Step 4	Search for information using the internet.
Step 4	Review printed work and state if it is good or bad.
Step 5	Navigate the web and can carry out simple web searches to collect digital content.
Step 5	Select information from a variety of ICT sources for a straightforward task.
Step 6	State the difference between data and information.
Step 6	Use different functions within programs to enhance the quality of work.
Step 7	Combine different forms of information from various sources such as graphs and charts.
Step 7	Understand the reliability of information research created.
Step 8	Select the information needed for different purposes, check its accuracy and organise it in a form suitable for processing.

Skills and Progression ‘snap-shot’

SOLAR: Computing—Research	
Step 8	Make sensible decisions about whether information is accurate or not and give reasoning's.
Step 9	Assess how valid information is by comparing it to other sources.
Step 9	I can state/show how to effectively use search engines, and know how search results are selected (Advanced searches).
Step 10	Use appropriate search techniques to locate and select relevant information.
Step 10	Know that search engines, queries and AND/ NOT/OR, >,=,<=, contains, begins with, use of wild cards.
Step 11	select information from a variety of sources to meet requirements of a complex task.
Step 11	Recognise and take account of copyright and other constraints on the use of information.

Skills and Progression ‘snap-shot’

SOLAR: Computing— Test	
Step 1	Load a numeracy game and choose time/money.
Step 2	Identify and correct simple errors.
Step 3	Display numerical data in a graphical format.
Step 4	Combine information within a publication for a familiar audience and purpose for print and for viewing on screen.
Step 5	Select and use software applications to meet needs and solve straightforward problems.
Step 6	Use diagrams to express solutions.
Step 7	Self-assess own work and offer improvements.
Step 8	Explore the effects of changing the variables in an ICT based model.
Step 9	Test a product/program to make sure it fits the criteria set.
Step 10	Use more complex lines of enquiry to test hypotheses and can present ideas in a variety of ways showing a clear sense of audience.
Step 11	Select and adjust system settings as appropriate to individual needs.

Skills and Progression 'snap-shot'

SOLAR: Computing — Skills, knowledge and understanding	
Step 1	Record own music/ interview/ sounds on tape using a recording device.
Step 1	Access and navigate around an IPAD.
Step 1	Explain actions to others when using a program.
Step 1	Recognise and use interface features.
Step 1	Recognise myself on an audio tape/cd/track.
Step 1	Use and identify different technology.
Step 1	Receive and open electronic messages.
Step 2	Navigate around electronical device presentations.
Step 2	Identify different Apps on an IPAD.
Step 2	Print work out and identify the different printer signs.
Step 2	Play a game and show to how play it. Stating the positives and negative.
Step 2	Select section of DVD/ track on CD/ computer games.
Step 2	Type simple words on a keyboard.
Step 2	Store information 2.1 open and save files.
Step 3	Use input devices to manipulate items on a computer. (Keyboard, online keyboard, accessible mouse and switches).
Step 3	Identify the different icons/objects.
Step 3	Identify what storable items are (CDS, DVDS, USB pens and external Hard Drives).
Step 3	Understand what a simple algorithm is.

Skills and Progression 'snap-shot'

SOLAR: Computing — Skills, knowledge and understanding	
Step 3	Design a storyboard and create it using a computer/paper.
Step 3	Use a computer to work with a variety of sources (Writing, pictures and sound).
Step 3	Organise electronic messages, attachments and contacts.
Step 4	Use an IPAD independently and state where to and use apps once demonstrated.
Step 4	Understand where the save Icon is and what it is looks like.
Step 4	Copy text, data and images.
Step 4	Carry out a simple algorithm.
Step 4	Review a storyboard and critically assess it to improve the outcome.
Step 4	Independently state what program to use to suite the best purpose.
Step 4	Read, send and receive electronic messages with attachments.
Step 5	Recognise a range of digital devices.
Step 5	Identify different hardware products (input and output).
Step 5	Work with files, folders and other media to access, organise, store, label and retrieve information.
Step 5	Design a simple algorithm using loop, and selection i.e. if statements.
Step 5	Draw on own storyboards of everyday activities.
Step 5	Select and use interface features effectively to meet needs.
Step 5	Manage information storage.

Skills and Progression 'snap-shot'

SOLAR: Computing — Skills, knowledge and understanding	
Step 6	Use a variety of technology taking into account its different features and functions.
Step 6	Create a file/folder structure.
Step 6	Use ICT to save information and to find and use appropriate stored information.
Step 6	Create a program that implements algorithms to achieve given goals.
Step 6	Describe what is happening in a storyboard and recognise similarities between storyboards of everyday activities.
Step 6	Understand the difference between hardware and application software, and their roles within a computer system.
Step 6	State what a database is and the use of it. (home and business)
Step 7	Work with a variety of inputs and outputs.
Step 7	Exchange information and ideas with others in a variety of ways.
Step 7	Understand risks associated with communicating digitally, including the security of personal information.
Step 7	Give instructions involving selection and repetition.
Step 7	Think through' an algorithm and predict an output.
Step 7	State why and when computers are used.
Step 7	Recognise different types of data: text; number; instruction.
Step 8	Recognise and understand the function of the main internal parts of basic computer architecture.
Step 8	Use ICT to organise, store and retrieve information using logical and appropriate structures.

Skills and Progression 'snap-shot'

SOLAR: Computing — Skills, knowledge and understanding	
Step 8	State the importance of backing up work and demonstrate how to do it.
Step 8	Recognise similarities between simple problems and the commonality in the algorithms used to solve them.
Step 8	Analyse and present an algorithm for a given task.
Step 8	Use a computer to record events automatically. (data logging)
Step 8	Partially decompose a problem into its sub-problems and make use of a notation to represent it.
Step 9	Demonstrate wider range of ICT skills and tools.
Step 9	Share my work with others in a number of ways including email.
Step 9	Understand that digital computers use binary to represent all data
Step 9	Understand that iteration is the repetition of a process such as a (loop, repeated code/process).
Step 9	Describe a complex algorithm.
Step 9	Select and use a range of interface features and system facilities effectively to meet needs.
Step 9	Manage files, folders and other media storage to enable efficient information retrieval.
Step 10	Understand the different range of operators and expressions e.g. Boolean.
Step 10	Evaluate fitness for purpose of information.
Step 10	Query data on one table using a typical query language.
Step 10	Identify and state all the internal and external functions of a basic computer giving reasoning.

Skills and Progression 'snap-shot'

SOLAR: Computing — Skills, knowledge and understanding	
Step 10	Describe a complex algorithm and recognise that different algorithms exist for the same problem.
Step 10	Evaluate the selection, use and effectiveness of ICT tools and facilities used to present information at each stage of a task and at the task's completion.
Step 10	Organise and integrate information of different types to achieve a purpose, using accepted layouts and conventions as appropriate.
Step 11	Enter and edit information for a simple given purpose.
Step 11	Find specified information from ICT-based sources.
Step 11	Use software applications for a purpose.
Step 11	Use communications software to meet requirements of a complex task.
Step 11	Use appropriate field names and data types to organise information.
Step 11	Analyse and draw conclusions from a data set by searching, sorting and editing records.
Step 11	Use collaborative tools appropriately.

Skills and Progression 'snap-shot'

SOLAR: Computing — Program Sequence	
Step 1	Attempt to programme a toy.
Step 1	Use control programs to move an object.
Step 1	Recognise and use interface features.
Step 2	Navigate around a programmable toy.
Step 2	Recognise that many everyday devices respond to signals and instructions.
Step 2	Identify the different programs to carry out the work.
Step 3	Make programmable toys carry out instructions and plan a route for a programmable toy to follow.
Step 3	Use input and output devices.
Step 3	Change simple software settings.
Step 4	Plan and demonstrate a programmable toy moving round an environment.
Step 4	Use field names and data types to organise information.
Step 4	Use appropriate software to meet requirements of straightforward data-handling task process numerical data.
Step 5	Solve simple problems using programmable toys.
Step 5	Plan and give direct commands to make things happen such as playing robots.
Step 5	Enter, develop and refine information using appropriate software to meet the requirements of straightforward tasks.
Step 6	Use sequences of instructions to control devices and achieve specific outcomes.

Skills and Progression 'snap-shot'

SOLAR: Computing — Program Sequence	
Step 6	Give and plan a linear sequence of instructions to make things happen. (nonbranching).
Step 6	Recognise and take account of currency, relevance, bias and copyright when selecting and using information.
Step 7	Make appropriate choices when using ICT based models or simulations to help me find things out and solve problems.
Step 7	Analyse and represent symbolically a sequence of events.
Step 7	Debug simple programme to gain desired result.
Step 8	Plan and test sequences of instructions and understand the need to be precise.
Step 8	Design and create own program against a set criteria.
Step 8	Independently review and debug programs that accomplish specific goals.
Step 9	Plan and design ICT based solutions to meet a specific purpose and audience.
Step 9	Create a program that uses different variables.
Step 9	Write or debug a short program with little assistance.
Step 10	Design and use simple (1D) data structures.
Step 10	Use appropriate software to meet the requirements of a complex data-handling task.
Step 10	Process and analyse numerical data.
Step 11	Enter, develop and refine information using appropriate software to meet requirements of a complex task.
Step 11	Identify different patterns.
Step 11	Interact with and use ICT systems to meet given needs.

Skills and Progression 'snap-shot'

SOLAR: Computing — Evaluate	
Step 1	Talk about what I am doing.
Step 1	Load a resource and make choices.
Step 2	State/use the different Microsoft programs.
Step 2	Review how to follow procedure and try to repeat.
Step 3	Understand and discuss what different technology looks like and what it does.
Step 3	Use software applications to meet needs and solve given problems.
Step 4	Handle different equipment and link words to what they are.
Step 4	Bring together two given types of information for print and viewing on-screen.
Step 5	Recognise and use a range of input and output devices.
Step 5	Evaluate own use of ICT tools at each stage of a task and at the task's completion.
Step 6	Use logical reasoning to predict outputs.
Step 6	Share and exchange my ideas with others.
Step 7	Use diagrams to express solutions and use logical reasoning to predict outputs, showing an awareness of inputs.
Step 7	Interpret findings and recognise that poor quality information leads to unreliable results.
Step 8	Make predictions about the consequences of decisions.
Step 8	Use ICT to structure, refine and present information in different forms and styles for specific purposes and audiences.

Skills and Progression 'snap-shot'

SOLAR: Computing — Evaluate	
Step 9	Predict what is going to happen when I make a computer-based model. (Changing rules and sequences).
Step 9	Able to develop and refine my work to improve its quality, using a greater range and complexity of information.
Step 10	Use ICT based models to make predictions and vary the rules within the models.
Step 10	Critically assess work to make sure it is fit for purpose.
Step 11	Select and use software applications to meet needs and solve complex problems.
Step 11	Use ICT to plan and analyse complex or multi-step tasks and activities and to make decisions about suitable approaches.

Skills and Progression 'snap-shot'

SOLAR: Computing — Health & Safety	
Step 1	Understand the importance of staying safe online.
Step 1	Use correct procedures to start and shutdown and ICT system.
Step 2	Follow recommended safe practices.
Step 2	State what e-safety is and the different forms of bullying linking it to technology.
Step 3	Minimise the physical stress of seating, lighting and hazards.
Step 3	Keep access information secure by using password.
Step 4	Access an computer considering the safety .
Step 4	Keep access information secure by creating, using, maintaining and changing secure passwords.
Step 5	Follow and demonstrate understanding of the need for safety and security practices.
Step 5	Demonstrate an understanding of the need to stay safe and to respect others when using ICT-based communication
Step 6	Demonstrate how to use the computer safely and responsibly, knowing a range of ways to report unacceptable content and contact when online.
Step 6	Understand data transmission between digital computers over networks, including the internet i.e. IP addresses and packet switching.
Step 7	Demonstrate how to minimise the risk of computer viruses.
Step 7	Identify the main functions of the operating system and networks.
Step 8	Use logic and reasoning to detect and correct errors in programs.

Skills and Progression 'snap-shot'

SOLAR: Computing — Health & Safety	
Step 8	Understand the range of operating systems and application software for the same hardware.
Step 9	Select, interact with and use ICT systems safely and securely for a complex task in non-routine and unfamiliar contexts.
Step 9	Understand the need to stay safe using ICT-based communication.
Step 10	Respond to ICT problems and take appropriate action 2.5 understand the danger of computer viruses and how to minimise risk.
Step 10	Understand the need to show respect to others when using ICT-based communication.
Step 11	Work accurately and check accuracy, using software facilities where appropriate.
Step 11	Know how to insert and remove media following safety and security practices.

Skills and Progression 'snap-shot'

SOLAR: IMedia — LO1	
Step 9	LO1: Be able to review a digital graphic
Step 9	LO1: Understand the purpose and properties of digital graphics. Produce a summary of how and why digital graphics are used, demonstrating a limited understanding of the purpose of digital graphics.
Step 9	LO1: Understand the purpose and properties of digital graphics. Demonstrates a limited understanding of the connection between the properties of digital graphics and their suitability for use.
Step 9	LO1: Understand the properties and uses of 2D and 3D digital characters. Demonstrates a basic understanding of when and where 2D and 3D digital characters are used.
Step 9	LO1: Understand the properties and uses of 2D and 3D digital characters. Lists a few 2D and 3D digital characters and a limited range of basic software that can be used to create them.
Step 9	LO1: Understand comic strips and their creation. Demonstrates a limited understanding of the origins and history of multipage comic strips, which shows a limited awareness of their target audiences.
Step 9	LO1: Understand comic strips and their creation. Demonstrates a basic understanding of comic strip characters and limited knowledge of their respective physical and non-physical characteristics.
Step 9	LO1: Understand the uses and properties of digital video. Produces a summary on the uses of digital video products, identifying some of the sectors in which digital video is used which demonstrates a limited understanding

Skills and Progression ‘snap-shot’

SOLAR: IMedia — LO1	
Step 9	LO1: Understand the uses and properties of digital video. Describes with limited accuracy different video file formats and the properties of digital video.
Step 9	LO1: Understand comic strips and their creation. Identifies software that can be used to create a comic strip and some of the tools that can be used in its creation.
Step 9	LO1: Understand comic strips and their creation. Demonstrates a basic understanding of panel placement and story flow.
Step 9	LO1: Understand the properties and uses of 2D and 3D digital characters. Demonstrates a basic understanding of physical and facial characteristics of a limited range of 2D and 3D digital characters.

Skills and Progression ‘snap-shot’

SOLAR: IMedia — LO2	
Step 9	LO2: Be able to plan the creation of a digital graphic. Produce an interpretation from the client brief which meets few of the client requirements.
Step 9	LO2: Be able to plan the creation of a digital graphic. Produces a limited identification of target audience requirements.
Step 9	LO2: Be able to plan the creation of a digital graphic. Draws upon limited skills/knowledge/understanding from other units in the specification.
Step 9	LO2: Be able to plan the creation of a digital graphic Produces a work plan for the creation of the digital graphic, which has some capability in producing the intended final product.
Step 9	LO2: Be able to plan the creation of a digital graphic. Produces a work plan for the creation of the digital graphic, which has some capability in producing the intended final product.
Step 9	LO2: Be able to plan the creation of a digital graphic. Produces a simple visualisation diagram for the intended final product.
Step 9	LO2: Be able to plan the creation of a digital graphic. Identifies few assets needed to create a digital graphic, demonstrating a limited understanding of their potential use.
Step 9	LO2: Be able to plan the creation of a digital graphic. Identify a few of the resources needed to create a digital graphic, demonstrating a limited understanding of their purpose.
Step 9	LO2: Be able to plan the creation of a digital graphic. Demonstrates a limited understanding of legislation in relation to the use of images in digital graphics.
Step 9	LO2: Be able to plan the creation of a digital graphic. Demonstrates a limited understanding of legislation in relation to the use of images in digital graphics.

Skills and Progression 'snap-shot'

SOLAR: IMedia — LO2	
Step 9	LO2: Be able to plan original 2D and 3D digital characters
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Produces an interpretation from the client brief for a 2D or 3D digital character which meets few of the client requirements
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Produces a limited identification of target audience requirements.
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Identifies a few assets needed to create a 2D or 3D digital character, demonstrating a limited understanding of their purpose.
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Identifies a few of the resources needed to create a 2D or 3D digital character, demonstrating a limited understanding of their purpose.
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Produces a work plan for the 2D or 3D digital character which has some capability in producing the intended final character.
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Draws upon limited skills/ knowledge/understanding from other units in the specification.
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Produces a simple visualisation diagram for the 2D or 3D digital character.
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Creates a test plan for the character which tests some of the functionality.

Skills and Progression 'snap-shot'

SOLAR: IMedia — LO2	
Step 9	LO2: Be able to plan original 2D and 3D digital characters. Demonstrates a limited understanding of legislation in relation to the use of assets in 2D and 3D digital characters.
Step 9	LO2: Be able to plan a multipage comic strip. Produces an interpretation from the client brief for a multipage comic strip which meets few of the client requirements.
Step 9	LO2: Be able to plan a multipage comic strip. Produces a limited identification of target audience requirements.
Step 9	LO2: Be able to plan a multipage comic strip. Creates a script and storyline with some elements of originality.
Step 9	LO2: Be able to plan a multipage comic strip. Draws upon limited skills/knowledge/understanding from other units in the specification.
Step 9	LO2: Be able to plan a multipage comic strip. Creates rough sketches to plan the comic strip, including a panel layout which has limited accuracy.
Step 9	LO2: Be able to plan a multipage comic strip. Identifies a few assets needed to create a multipage comic strip, demonstrating a limited understanding of their potential use.
Step 9	LO2: Be able to plan a multipage comic strip. Identifies a few of the resources needed to create a multipage comic strip, demonstrating a limited understanding of their purpose
Step 9	LO2: Be able to plan a multipage comic strip. Demonstrates a limited understanding of legislation in relation to the use of assets in multipage comic strips, which is occasionally accurate.

Skills and Progression ‘snap-shot’

SOLAR: IMedia — LO2	
Step 9	LO2: Be able to plan a digital video sequence. Produces an interpretation from the client brief for a digital video sequence which meets few of the client requirements.
Step 9	LO2: Be able to plan a digital video sequence. Produces a limited identification of target audience requirements.
Step 9	LO2: Be able to plan a digital video sequence. Produces a work plan, shooting script and storyboard which have some capability in creating the intended digital video sequence.
Step 9	LO2: Be able to plan a digital video sequence. Produces a list of equipment and software to be used in creating the digital video sequence and gives brief reasons for selection in relation to the identified success criteria.
Step 9	LO2: Be able to plan a digital video sequence. Demonstrates a limited understanding of legislation in relation to the use of video footage (sourced and recorded).
Step 9	LO2: Be able to plan a digital video sequence. Draws upon limited skills/ knowledge/understanding from other units in the specification.

Skills and Progression ‘snap-shot’

SOLAR: IMedia — LO3	
Step 9	LO3: Be able to create and save a digital graphic. Sources or creates a limited range of assets for use in the digital graphic.
Step 9	LO3: Be able to create and save a digital graphic. Prepares the assets for use in the digital graphic, some of which are technically appropriate or compatible.
Step 9	LO3: Be able to create and save a digital graphic. Use of standard tools and techniques to create the digital graphic is limited and therefore creates a simple digital graphic which is appropriate to some aspects of the client brief
Step 9	LO3: Be able to create and save a digital graphic. Occasionally saves and exports the digital graphic in formats which are appropriate.
Step 9	LO3: Be able to create and save a digital graphic. Occasionally saves electronic files using appropriate file and folder names and structures.
Step 9	LO3: Be able to produce a multipage comic strip. Sources and stores a limited range of assets for use, occasionally using methods which are appropriate
Step 9	LO3: Be able to produce a multipage comic strip. Prepares the page layout for the comic strip with panels, not all of which are complete.
Step 9	LO3: Be able to produce a multipage comic strip. Inserts some basic assets into the comic strip panels, sometimes establishing appropriate focal points.
Step 9	LO3: Be able to produce a multipage comic strip. Creates a story and narrative within the strip of limited coherence, which is occasionally in line with the plan.

Skills and Progression ‘snap-shot’

SOLAR: IMedia — LO3	
Step 9	LO3: Be able to produce a multipage comic strip. Saves and exports the comic strip occasionally using appropriate formats.
Step 9	LO3: Be able to produce a multipage comic strip. Occasionally saves electronic files using appropriate file and folder names and structures
Step 9	LO3: Be able to create a digital video sequence. Uses a limited range of camera techniques to record original video footage. Identification of original footage for use in the digital video sequence is partly appropriate
Step 9	LO3: Be able to create a digital video sequence. Sources additional video footage to create assets, which are appropriate in some cases for the digital video sequence.
Step 9	LO3: Be able to create a digital video sequence. Imports a limited range of assets into video editing software, demonstrating a basic understanding of the limitations imposed by the software.
Step 9	LO3: Be able to create a digital video sequence. Uses a limited range of video editing, production and enhancement tools and techniques, in ways that are occasionally appropriate.
Step 9	LO3: Be able to create a digital video sequence. Saves and exports the digital video sequence occasionally using a format which is appropriate. Demonstrates limited awareness of the limitations imposed by different file formats and sizes.
Step 9	LO3: Be able to create a digital video sequence. Occasionally saves electronic files using appropriate file and folder names and structures.
Step 9	LO3: Be able to create a digital video sequence. Produces a digital video sequence with few simple parts which partially reflects the planning and meets some of the client requirements.

Skills and Progression ‘snap-shot’

SOLAR: IMedia — LO4	
Step 9	LO4: Be able to review the digital graphic. Produces a review of the finished graphic which demonstrates a limited understanding of what worked and what did not, making few references back to the brief.
Step 9	LO4: Be able to review the digital graphic. Review identifies areas for improvement and further development of the final digital graphic, some of which are appropriate and sometimes explained.