



Holy Trinity Progression Map of Key Concepts for Design & Technology

Design & Technology

Exam:

Final written exam testing understanding of core, specialist and design & making principles.

Revision for exam

Specialist technical principles

Project - Selection of materials, working with materials, communication of ideas, specialist techniques and surface treatment and finishes.

NEA:

Application of core, specialist and design & making principles.

KS4 Design Technology

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Specialist technical principles

Theory on a range of materials

Design and making principles

Project – Forces and stresses, the work of others, investigation, environmental, social and economic challenge and design strategies

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Core technical principles

New & emerging technologies, Energy generation and storage, mechanical devices, and materials and properties.

Generating Ideas:

How can I use a named designers products to design a different product?

Evaluating:

Have I met the design context well?
How could my product be further improved and developed?

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Design Influences:

How can other people's designs and products help me design?

Generating Ideas (Mini light):

Can I create a range of suitable ideas using a brief and specification?

Making:

How could I make a high quality product independently?
Can I use CAD/CAM successfully?

Evaluating (Mini light):

How could I develop my product further in order to improve it?

Making (Mini light):

How could I incorporate electronic systems into my product to make it work?

Design Influences (Mini light):

Can I design and make a product for a given client?

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Making (name plate):

How can I create a high quality finish on my product?

Evaluating (name plate):

Does my product meet my design brief and specification?

Making (Metal keyring):

Can I remember how to avoid hazards in the workshop?
How do I work with and finish a metal?

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Generating Ideas (Name plate):

How can I design to meet a brief and design specification?

Evaluating (Pencil box):

What went well?
How does my product need improving?

Making (Pencil box):

How do I work safely?
How do I measure and cut accurately?

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Design Influences:
1 How did wartime rationing affect recipes?
2.What was the role of the labyrinth in Greek mythology?

Generating Ideas:
1.Can I use wartime rationing to make my scones?
2.What features make a successful labyrinth?

Making:
1.Can I make my rationed scones and compare them to scone recipes of today?
2.Can I successfully select, measure, cut and join materials?

Evaluating:
1. Can I comment on the scones made with the rationed ingredients compared to non rationed scones?
2.What features of my design made my labyrinth successful?

Design Influences:
1. What are the different components of a shoe?
2. How do levers & mechanisms work?
3. What does George Carradine's work consist of?:

Generating Ideas:
1. What materials would be most appropriate for a sandal?
2. How can I make my farm animal move?
3. How can I incorporate George Carradine's work into my design?

Making:
1. How do I measure, cut and join materials accurately?
2. Does my farm animal move?
3. How will I make my circuit in order to make my model light up?

Design Influences:
1. What are typical ingredients used in Chinese ?
2. How do cars move?

Generating Ideas:
1.Does my recipe include Chinese ingredients?
2. Do my designs include common features of a car?

Making:
1.Can I cook my Chinese ingredients safely and hygienically stating the origin of the food?
2. How will I cut, shape, join and finish my car?

Evaluating:
1.Could I use different Chinese ingredients next time to improve my recipe?
2. How could I develop my design to make it suitable for different terrains?

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Evaluating:
1. Is the stitching and fastening neat and accurate?
2. Can I compare the bread from the given eras to bread eaten today?

Generating Ideas:
1. What fastening will be most appropriate for my purse?
2. What ingredients are available to use during these periods of time?

Design Influences:
1. What makes a purse fit for purpose?
2. What influences the ingredients used in breadmaking during the Bronze and Iron ages?

Making:
1. What type of stitch will I use to join the fabric?
2. What variety of ingredients will I use to reflect the period in time?

Generating Ideas:
1. Can I design my rainforest animal based on Henri Rousseau's work?
2. Does my afternoon tea replicate that of one made during the Victorian period?
3. What are the main features of a lighthouse, can I include these in my design?

Making:
1. How will my animal move and stand?
2. How can I make my afternoon tea resemble the Victorian era?
3. How can I create a hinge and a working light in my lighthouse?

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Design Influences:
1. What influenced Henri Rousseau's work?
2. What would make a suitable afternoon tea for the Victorian Spencer-Stanhope family of Cannon Hall?
3. What is the purpose of a lighthouse?

Evaluating:
1. What could I improve next time?
2. Could I use other Victorian recipe ingredients/influences next time?
3. Does the lightbulb work?

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Evaluating:
1. Is my puppet appealing to others?
2. Does my sliding picture work?
3. Is my house sturdy and well made?

Making:
1. Which materials and techniques could I use?
2. How will my sliding picture move?
3. How can I join materials to make a house?

EYFS1 and 2
Can we use and explore a variety of tools techniques and media to design, produce and evaluate and adapt where necessary our own ideas independently or ideas suggested by an adult?

Design Influences:
1. What features does a good toy have?
2. What do we need sliders for?
3. What did houses look like in the 17th Century?

Generating Ideas:
1. What makes a good sock puppet?
2. What does a good design include?
3. What materials can I use to create a junk model house?

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