Design and Technology KSHSSA Key Stage 3 Descriptors

DT Strand 1 Research – information gathering

Pathway	Year 7	Year 8	Year 9
Foundation	Can identify with Design Brief and select key words	Can identify with the Design Brief and ask questions about the key words.	Identify with the Design Brief, ask questions about brief and identify the target market.
Core	Identify the target market. Find images of existing products and other simple information beyond the classroom.	Identify the target market and identify how to gain information from them.	Describe the target market from the design brief and explain how to gain information from them.
	Can identify 3 methods of research which are appropriate. Can use simple research data in my design work. E.g. Materials information, sizes etc.	Can identify 4 pieces of research which are appropriate. Research shows a link to my brief and gives me some important technical information for my specification. E.g. materials, sizes, components, ingredients etc.	Produce a plan for actioning research.
	Uses ideas from others designing to help you do your work Research shows a link to my brief and gives me some important technical information for my specification. E.g. materials, sizes, components, ingredients etc.	Find images of existing products and other simple information beyond the classroom. Explain how these could be used in designs.	Place a time line against research which is realistic to the demands of the project.
	Show evidence of research from two sources independently, e.g., internet, magazines, books, surveys etc. Research shows evidence of analysis of form and function of similar/familiar products (Other peoples design work)	Produce a minimum of one A4 page of analysis that is descriptive and draws helpful conclusions related to the design task	Include 4 different sources of information and ensure main aspects are fully annotated and analysed.
Proficient	The research is used to write a basic 7-10 point specification Specification is appropriate to the task Specification must include at least 2 measurable points	Research shows evidence of analysis of form and function of similar/familiar products (Other peoples design work) Applies understanding of form and function to own design work	.Include at least 5 different sources of information- all fully annotated and analysed.
	My specification must include 3 appropriate measurable points within a 10 point spec My specification has some users' views included in it My specification is mostly relevant to the design task	Applies the conclusions from research and analysis to show how ideas better fit the target market. Can display some of conclusions using ICT	Uses 5 different and yet appropriate sources of research Include product analysis of an existing and related product.
Exceptional	Specification must include 3 appropriate measurable points within a 10 point spec	Specification will be 10-15 points and be done mostly independently of which 5 are measurable points.	Uses 5 different but appropriate methods of research. Include investigation into industrial processes.
	Specification has some users' views included in it	All other points are relevant to the design task and include user's views and needs.	Uses 5 pieces of research and each is fully analysed & evaluated. Shows a creative approach to research

Design and Technology KSHSSA Key Stage 3 Descriptors

Exceptional	Specification identifies a balance between Must, Should & Could elements of the desired product.	Specification has been done independently and relates to analysed research. (e.g., Clear reference to form and function, materials, users etc.) Specification includes client input/feedback.	Works independently to organise own research and plan own project. Will consider a wide range of information and client group needs.

DT Strand 2: Modelling and Developing			
Grade	**Year 7**	**Year 8**	**Year 9**
Foundation	One or two basic sketches are produced	One or two basic sketches are produced with some annotation	A range of sketches are produced with some annotation.
Core	A basic model\ prototype is made using one material.	A basic model / prototype is made with more than one material.	A model is made/ prototype is made using more than one material and photographed sketches show one key change that could be made. Model is made and photographed.
	Can explain how a change can be made	Can explain how one or more changes can be made, written explanation of changes.	Sketches& models show two possible changes that can be done.
	Sketches show some changes from one idea to another.	Use sketches to show changes and annotate the key differences in ideas. Is capable of using Specification points to explain.	Use sketches to show changes & differences in own ideas. Annotation to identify the key points against the specification.
	The needs of the end user are explained. Materials to be used are listed and equipment listed.	Identifies the key needs of the end user and shows how the materials can be suitable for the product. Lists materials and equipment needed for production.	Use understanding of materials when developing idea. Show use of range of tools/ equipment. Reflect on designs as they develop whilst thinking about how product will be used. Relate to specification.
Proficient	Uses existing products to compare own model to. Lists form & function of own product.	Looks at existing products to compare ideas and models to own work. Showing how the function of the product is important. Awareness of the form of the product is clear in the modelling.	Use understanding of familiar products when developing & communicating own ideas. Check work as it develops & modify where necessary to identify form versus function. Show evidence of using product analysis. Sketch & notes show more than one idea considered.
	Show how materials and methods are suitable for modelling.	Identify materials & methods that are appropriate for model. Clearly show why they are suitable through explanation.	Use understanding of familiar products, materials & components when developing & communicating own ideas. Use sketches & notes to show fully understand how ideas can be refined into final product
Exceptional	Sketches and notes show how a product can be made.	Sketches & notes show how the idea can be refined into final product- list of alternatives included	Demonstrate understanding of familiar products, materials, components & processes when developing & communicating own ideas. Relate to research on production techniques & include this in own ideas. Write short report on how idea could be mass produced.
	Responding to information gathered. Range of strategies to develop appropriate ideas, Use sketches & drawings to show how ideas progressed into final product.	Responding to information gathered. Range of strategies to develop appropriate ideas, Use sketches & formal drawings to show how ideas progressed into final product. Support with explanation	Responding to information gathered. Range of strategies to develop appropriate ideas, Use sketches & formal drawings to show how ideas progressed into final product. Support with explanation. Make presentation in an eye catching way.
	Use of 2 methods to develop appropriate ideas, using own research – Photos, sketches fully annotate. Link to the Spec and the TM.	Use a 2 or more strategies to develop appropriate ideas, responding to the Information that has been gathered. – Model in various ways, Photos, sketches fully annotate. Link all work to the Spec and the TM.	Use a range of strategies to develop appropriate ideas, responding to the Information that has been gathered. – Model in various ways, Photos, sketches fully annotate. Link all work to the Spec and the TM.

DT Strand 3: Evaluation

Design and Technology KSHSSA Key Stage 3 Descriptors

Grade	Year 7	Year 8	Year 9
Foundation	One success & one problem of the product is included	One success & one problem of the product is included	One success & one problem of the product is included.
Core	Final product has some comments written about it.	Final product has some comments written about it.	Final product has some comments written about it.
	Has made notes on ideas and about final product about WWW & EBI. A photograph has been included.	Has made notes on ideas and about final product about WWW & EBI. A photograph has been included and annotated.	Has made notes on ideas and about final product about WWW & EBI. A photograph has been included
	Comments on design ideas. Likes & dislikes are clear.	Comments on design ideas. Likes & dislikes are clear.	Has included bullet points identifying positive & negative points about the work. Some suggestion about improvement has been included.
	Comments on design ideas. Likes & dislikes are clearly explained. Own view is included.	Comments on design ideas. Likes & dislikes are clearly explained, with suggestions for changes. Own view is included.	Has reflected on designs as they have developed. Has shown what is liked and disliked, giving reasons why. Has explained what was easy / hard / liked & disliked giving reasons why.
Proficient	Product tested against Specification- explains the results. All stages of designing are evaluated. Peer review has been carried out.	Product tested against Specification- explains the results. All stages of designing are evaluated. Own view included. Peer review has been carried out & comments included.	Test and evaluate product against Specification- explain the results. All stages of designing are fully evaluated. Own views are given; include the opinion of at least one other.
	Explain how successful the practical work and the design & modelling have been. Include people's views and test against Specification. Identify one further improvement.	Explain how successful the practical work and the design & modelling have been. Include people's views and test against Specification. Identify at least one improvement.	Explain how successful the practical work and the design & modelling have been. Include people's views and test against Specification. Identify areas for improvement.
Exceptional	Uses Specification to evaluate against, includes feedback from target market. Explanation included showing any further work that would be needed if you were to do again.	Uses Specification to evaluate against, includes feedback from target market. Explanation included showing any further work that would be needed if you were to do again.	Uses Specification to evaluate against, includes feedback from target market. Sketches or explanation included to show any further work that would be needed if you were to do again; how could the performance be improved.
	Product is evaluated against Specification and meets the criteria. 'Form & Function' are clearly identified. Feedback from target market is presented.	Product is evaluated against Specification and meets the criteria. 'Form & Function' are clearly identified. Feedback from target market is presented.	A range of criteria has been used to evaluate against. Product considered in terms of 'Form & Function'. Meets the needs of the Specification & includes feedback from Target Market.
	In final evaluation, have included feedback from target market. Product meets the Specification requirements. Identifies time and materials used.	In final evaluation, have included feedback from target market. Product meets the Specification requirements. Identifies time and materials used.	Product is meets the initial brief & client /target market needs. Has shown how well time resources and time have been used. Feedback from client/ target market presented.