

DT Developing ideas and communicating ideas

- Step 1
- I have investigated some common products.
 - I use my knowledge of these products to think of some ideas for my designs.
 - I can use pictures and words to show what I want to do.*

- Step 2
- After doing some research, I can think of some suitable ideas for my designs.
 - I can say what my design has to do.
 - My designs show that I am beginning to understand the needs and wants of users.
 - I can show my design ideas by drawing pictures and making models.*
 - I can describe my designs to others by writing or talking about them.*

- Step 3
- I use ideas from my research work (investigating and evaluating existing products) to make good designs.
 - I can think of some suitable ideas and I am beginning to develop the ideas I think of.
 - My designs show that I understand that the product must meet the needs and wants of particular users.
 - My sketches of design ideas include some labels or notes and are clear enough for others to be able to understand the details of my designs.*
 - I can talk about some of my design decisions (e.g. about choice of materials and sizes of parts, etc) in some detail.*

- Step 4
- I generate ideas by collecting and using information from my research.
 - I take users' views into account in my designs.
 - I can show how my ideas have developed by drawing labelled sketches and by talking or writing about them.
 - I show my designs using detailed sketches with detailed labels and notes (including information about dimensions, etc.) and with models (prototypes).*
 - My designs show: my alternative ideas, that I understand the design constraints, my knowledge of structures, materials and/or mechanisms.*
 - When asked, I can explain why I have chosen certain materials and processes.*

- Step 5
- When developing my own ideas I use my understanding of the characteristics of existing products and consider the situation in which my products will be used.
 - I am beginning to see resources as constraints.
 - I develop and clarify my own ideas through discussing them with others, drawing and modelling them.*
 - My sketches of my design ideas are clear and detailed and I annotate them in some detail.*

DT Planning work and producing quality products

- Step 1
- I can think of some things I will have to do to make my product. and some of the things I might need to make it.
 - I can talk to my teacher about these things.
 - I can use some basic tools safely.*
 - When I am making my product, I can tell someone about what I am making, how I am doing it and the tools I am using.*

- Step 2
- I can write down some things I will have to do to make my product on my planning sheet – I usually know what to do next when I am using materials and techniques that I have used before.
 - I am beginning to make sensible choices about materials, tools and techniques from the range that is available. I can explain the choices I make.
 - The product I made "works" and it matches my design ideas quite well.*
 - I use tools safely to assemble, join and combine materials and components for my product.*
 - I try to be careful and accurate when I am using the techniques I have been shown.*

- Step 3
- I use information from researching/evaluating existing products to help me make good choices.
 - I can think ahead and plan the order of things I will need to do to make my product. On my planning sheet I list all or (or nearly all) of the steps - mostly in the correct order.
 - I pick appropriate tools, equipment, materials, components and techniques from the choice I am given.
 - I work quite accurately with tools and equipment to measure, mark out, cut and shape materials and to put together components.*
 - My final product "works" properly. (It is suitable for its purpose.)*
 - My final product shows signs of quality: it looks good and is accurately made.*

- Step 4
- I produce detailed step-by-step plans that include all the main stages in making my product. (The steps are in the correct order.)
 - I choose appropriate tools, equipment, materials, components and techniques – thinking about function of my product and quality of finish when making my choices.
 - I work quite accurately with a variety of materials, components, tools and equipment*
 - My final product matches my design quite well and I make sure it "works" well (functions properly).*
 - My final product is accurately made and I give attention to the quality of finish to make sure this is good.*

- Step 5
- I work from my own detailed plans, modifying them where appropriate.
 - I check my work as it develops and modify my approach if required.
 - I work with some precision using a range of tools, materials, equipment, components and processes.*
 - I make my product accurately, using appropriate materials and techniques.*
 - I finish it to a high standard.*

DT Evaluating processes and products

- Step 1
- I look at and try out products and I can describe how they work.
 - I talk about my own and other people's work.

- Step 2
- While I am making my product, I can talk about what I have done well and what I could do better if I had another go.
 - I can say what works well in my product.

- Step 3
- I can explain how evaluating my design and my product as I was making it, helped me to modify and improve the final product.
 - I make sensible judgements about how well my products work.
 - I can talk about some ways that my product matches the needs and wants of the user.
 - I can make some comments about its appearance and the quality of its finish.

- Step 4
- I can identify what works well and what could be improved in my product.
 - I think carefully about how my design will be used while I am making it and modify the design, if necessary.
 - I evaluate my product in relation to: its purposes (what it has to do); the users' needs and wants; the accuracy with which it has been made and the quality of its finish.
 - I can suggest alternative ways of making my product.

- Step 5
- While I am making my product, I think about how it is developing and modify my design where necessary.
 - I test and evaluate my products, showing that I understand the situations in which my designs will be used.
 - I can make thoughtful evaluations of both the appearance of my product and how well it works against the original design criteria (the functions of the product, its purposes, and the users' needs and wants).

Materials used in Design Technology:

Tools used in Design Technology:

Name: _____

Design Technology

My DT topics and projects:
