Design Technology - Year 7- Out of the Box – Hold It.

Use the resources below to support you when learning from home. You can use this to help catch up on missed work, to get that extra help you might need, or to show to your family what you have been learning about at school! This supports the understanding of the Design Process, modelling skills and Technical Knowledge you will be learning within year 7 for the different tasks set over the year.

Task	What we are learning	Resources
1: The design process	To demonstrate the understanding of the design process and how we use it in Design Technology	**Activities:** Complete design sheet showing your understanding on how the process works. Write a conclusion in your own words how the process works. **Resources:** https://www.youtube.com/watch?v=W-eqjMc1Efs https://www.youtube.com/watch?v=EZDDUubN5WE Thread: how to start this process - Problem
2: Introduction & Problem	Be able to understand how to address a problem and gather the relevant information about it.	**Activities:** Look at this real-life problem and see how a problem is researched. Once this has been explained and modelled the problem for this project is given to the pupils written up in their books and the facts shown to back it up. **Resources:** https://www.youtube.com/watch?v=Kr3N51BUFwE https://www.youtube.com/watch?v=7IP0Ch1Va44 Thread: Problem-Inspiration board
3: Inspiration board	Be able to understand the benefits of an inspiration board.	**Activities:** Create an Inspiration board based on cardboard furniture. Once this has been completed pupils need to print this out a stick into their books with a summary of their findings. **Resources:** https://www.youtube.com/watch?v=B1L-cZQLNTs Thread: Problem-Inspiration Board-Design Brief
4: FPT: Scamper	Be able to understand what SCAMPER means.	**Activities:** Work through the SCAMPER process explaining each step and apply this to an everyday product. **Resources:** https://www.youtube.com/watch?v=ru9-74qLXAo Thread: Problem-Inspiration Board-Design Brief
5: Design brief	Be able to understand and be break down a problem to write a design brief.	**Activities:** Look at this real-life problem and see how a brief is written. Once this has been explained the problem for this project is given and the pupils write the design brief themselves in their books. **Resources:** https://www.youtube.com/watch?v=oc8RP7Vfol0 Thread: Problem-Design Brief-Possible Solutions-Material Research-Specification-Initial Ideas-
6: Research-Material research	How different materials are made and their properties.	**Activities:** Watch the video to find out about the materials are made put this in their books as bullet points. Also use the knowledge mats to find out about stock sizes and finishing techniques. **Resources:** https://www.youtube.com/watch?v=HL2yvqSk8Ww Thread: Problem-Design Brief-Possible Solutions-Material Research-Specification-Initial Ideas-
7: Product analysis	Be able to look at other products and use ACCESSFM to give a product analysis about it.	**Activities:** Look at this real-life product, choose one and apply ACCESSFM to give a analysis about the product. From this then write a conclusion about the chosen product. **Resources:**

8: Research FPT-nets and how they work and assembled	To have an understanding of how nets work and are produced.	Activities: Create different solid 3D models based on 2D nets. Resources: https://www.youtube.com/watch?v=46GXbHBA6k4 https://www.youtube.com/watch?v=ICmzPt3St7o https://www.youtube.com/watch?v=Ra8R-Xbzjmc https://www.youtube.com/watch?v=Q7IHlvNaKGc Thread: Problem-Design Brief-Possible Solutions-Material Research-Specification-Initial Ideas-
8 Specification & Initial ideas	To understand the importance of a specification and why we use them.	**Activities:** Look at how a specification is broken down and master an example with the pupils. Pupils to write a basic specification together in groups for the out of the box design brief. **Resources:** https://www.youtube.com/watch?v=UMH8gHl4kS4 https://www.youtube.com/watch?v=jgeE5l2cRAk https://www.youtube.com/watch?v=xVvkONMT3zs Thread: Problem-Design Brief-Possible Solutions-Material Research -Specification -Initial Ideas-Modelling-Final development of design-Development of idea
9 Modelling & Final Development of Idea	How to manufacture models of initial ideas to show a 3D representation.	**Activities:** Model final idea for further development, scale model. **Resources:** https://www.youtube.com/watch?v=rYE8L7JFqQI https://www.youtube.com/watch?v=x6s3lGH4MyI https://www.youtube.com/watch?v=fj2aAn3pUwk Thread: Problem-Design Brief-Possible Solutions-Material Research -Specification -Initial Ideas-Modelling-Final development of design-Development of idea-Working Drawing-Production Plan
10 Working Drawing & Production Plan	How to manufacture models of Final idea in a 3D representation.	**Activities:** Model final idea for further development, scale model. **Resources:** https://www.youtube.com/watch?v=CdX_V85L2MI Thread: Problem-Design Brief-Possible Solutions-Material Research -Specification -Initial Ideas-Modelling-Final development of design-Development of idea-Working Drawing-Production Plan-Production of Final Prototype-Final Evaluation-Reflection
11 Production of Final Prototype	How to manufacture Final idea in a 3D representation.	**Activities:** Produce final idea with further development, scale model. **Resources:** https://www.youtube.com/watch?v=k_9Q-KDSb9o Thread: Problem-Design Brief-Possible Solutions-Material Research -Specification -Initial Ideas-Modelling-Final development of design-Development of idea-Working Drawing-Production Plan- Production of Final Prototype-Final Evaluation-Reflection
12 Final Evaluation & Reflection	To gain an understanding of being able to create a reflective evaluation on final prototype.	**Activities:** To write a reflective evaluation based on their specification with a reflection based on further improvements. **Resources:** https://www.youtube.com/watch?v=FmWlQ1X6gzo https://www.youtube.com/watch?v=WjLa2sJjla0 Thread: Problem-Design Brief-Possible Solutions-Material Research -Specification -Initial Ideas-Modelling-Final development of design-Development of idea-Working Drawing-

		Production Plan- Production of Final Prototype-Final Evaluation-Reflection
Out of the Box	Pupils are using their Design skills, Technical Knowledge and Making skills to produce a model of a prototype piece of furniture which can be produced from Waste cardboard packaging from Amazon. This is showing pupils what we can do as Designers to help resolve the problem with have with waste and supporting the environment.	**Resources:** https://www.youtube.com/watch?v=GZFwa0WIsLk https://www.youtube.com/watch?v=Dotgnw1JxG8 https://www.youtube.com/watch?v=vPIQDAvmBBU https://www.youtube.com/watch?v=IBkQCemuAGM https://www.youtube.com/watch?v=ndq4F6s63Ls https://www.youtube.com/watch?v=ZSbSUwNCwgw https://www.youtube.com/watch?v=vP3FPd2dGGo https://www.youtube.com/watch?v=XheFIAfO1iw https://www.youtube.com/watch?v=g3MLAKa03fQ
Hold It!	Pupils are using their Design skills, Technical Knowledge and Making skills to produce a model of a prototype of a desk organiser for people who are working at home/from home. This is teaching the pupils to be problem solvers in the world they live in everyday.	**Resources:** https://www.youtube.com/watch?v=oUskPMAtdNk https://www.youtube.com/watch?v=5wGVPYuKfZs https://www.youtube.com/watch?v=YkE80yu-eYQ https://www.youtube.com/watch?v=IjrAaIT4GaU https://www.youtube.com/watch?v=AKZKYW2X_wl https://www.youtube.com/watch?v=sxNBzGwwOv4 https://www.youtube.com/watch?v=CSP6wOec-JA