Whole School Progression Document:

Subject: DT

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|   | KS1  | Lower KS2 | Upper KS2 |
| Cooking and nutrition  | N/A | **Design**• Designing a recipe for a savoury tart.**Make**• Following the instructions within a recipe • Tasting seasonal ingredients. • Selecting seasonal ingredients. • Peeling ingredients safely. • Cutting safely with a vegetable knife.**Evaluate**• Establishing and using design criteria to help test and review dishes. • Describing the benefits of seasonal fruits and vegetables and the impact on the environment. • Suggesting points for improvement when making a seasonal tart. | **Design**• Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients. •Writing an amended method for a recipe to incorporate the relevant changes to ingredients. • Designing appealing packaging to reflect a recipe. • Researching existing recipes to inform ingredient choices.**Make**• Cutting and preparing vegetables safely. • Using equipment safely, including knives, hot pans and hobs. • Knowing how to avoid cross-contamination. • Following a step by step method carefully to make a recipe.**Evaluate** • Identifying the nutritional differences between different products and recipes. • Identifying and describing healthy benefits of food groups |
| Structures  | **Design**• Learning the importance of a clear design criteria. • Including individual preferences and requirements in a design. • Generating and communicating ideas using sketching and modelling.• Learning about different types of structures, found in the natural world and ineveryday objects.**Make** • Making stable structures from card, tape and glue.• Learning how to turn 2D nets into 3D structures.• Following instructions to cut and assemble the supporting structure of awindmill.• Making functioning turbines and axles which are assembled into a mainsupporting structure.Making a structure according to design criteria.• Creating joints and structures from paper/card and tape.• Building a strong and stiff structure by folding paper**Evaluate** • Evaluating a windmill according to the design criteria, testing whether thestructure is strong and stable and altering it if it isn’t• Suggest points for improvements Exploring the features of structures.• Comparing the stability of different shapes.• Testing the strength of own structures.• Identifying the weakest part of a structure.• Evaluating the strength, stiffness and stability of own structure | **Design**• Designing a shelter with key features to appeal for a specific purpose. • Drawing and labelling a shelter design using 2D shapes, labelling: -the 3D shapes that will create the features - materials needed and colours.**Make**• Constructing a range of 3D shapes using a range of resources.• Creating special features for individual designs. • Using specific joining techniques to bind structures.**Evaluate**• Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison to the original design. • Suggesting points for modification of the individual design | **Design**• Designing a playground featuring a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs.**Make**• Building a range of play apparatus structures drawing upon new and prior knowledge of structures. • Measuring, marking and cutting wood to create a range of structures. • Using a range of materials to reinforce and add decoration to structures.**Evaluate** •Improving a design plan based on peer evaluation. • Testing and adapting a design to improve it as it is developed. • Identifying what makes a successful structure. |
| Mechanisms  | **Design** • Selecting a suitable linkage system to produce the desired motion.• Designing a wheel.• Creating a class design criteria for a moving monster.• Designing a moving monster for a specific audience in accordance with a designcriteria.**Make** • Selecting materials according to their characteristics.• Following a design brief• Making linkages using card for levers and split pins for pivots.• Experimenting with linkages adjusting the widths, lengths and thicknesses of cardused.• Cutting and assembling components neatly.**Evaluate**• Evaluating different designs.• Testing and adapting a design.• Evaluating own designs against design criteria.• Using peer feedback to modify a final design.  | **Design**• Designing a shape that reduces air resistance.• Drawing a net to create a structure from. • Choosing shapes that increase or decrease speed as a result of air resistance. • Personalising a design.**Make** • Measuring, marking, cutting and assembling with increasing accuracy. • Making a model based on a chosen design.**Evaluate** • Evaluating the speed of a final product based on: the effect of shape on speed and the accuracy of workmanship on performance. | **Design**• Designing a pop-up book which uses a mixture of structures and mechanisms. • Naming each mechanism, input and output accurately. • Storyboarding ideas for a book.**Make**• Following a design brief to make a pop up book, neatly and with focus on accuracy. • Making mechanisms and/or structures using sliders, pivots and folds to produce movement. • Using layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result.**Evaluate**•Evaluating the work of others and receiving feedback on own work. • Suggesting points for improvement |