## CEC Key Stage 2 Learning Journey: D and T

## spring Term

## Spring Term To Create a Geodesic

 DomeUse research into famous designers and inventors to inform design. Generate, develop, model and
communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.
Apply understanding of computing to program, monitor and control his/her product.

## Summer Term

Extra Curricular<br>Drawing Club<br>Jewellery Club<br>Lego Club<br>Engineering Club

## Autumn Term

## Year <br> 

## Summer Term

To Create a Healthy Pasta Sauce to Go With a Meal

- Understand the main food groups and the different nutrients that are important for health Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat.
- Select appropriate ingredients and use a wide
range of techniques to combine them.


## Autumn rerm

Create a Christmas Cam Toy
Use knowledge of existing products to design a functional and appealing product.
Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user.
Use techniques which require more accuracy to cut, shape, join and finish work.
Evaluate

## Designg and Sukinger Term Designing and Making a Healthy Oat Bar with Packaging

Understand the main food groups and the different nutrients that are important for health Select appropriate ingredients and use a wide range of techniques to combine them.

## Spring Term

Using Pneumatics to Create an Erupting Volcano

Understand how mechanical systems such as levers and linkages or pneumatic systems create movement.

Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them. (Processes)

## Autumn Term

to Create and Test a Working Portable Water Filter
Use knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made.
Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer aided design.
Use technical knowledge accurate skills to problem solve during the making process.

## Summer Term

Using Natural Ingredients to Create a Healthy Trail Mix

- Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active.
Understand seasonality and the advantages of eating seasonal and locally produced food.
Read and follow recipes which involve several processes, skills and techniques.



## Autumn Term

Make a Two-Point Lever Christmas Card

## Year

4 - Use his/her knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them. Apply techniques he/she has learnt to strengthen structures Evaluate

Spring Ferm
Designing and
Creating in 3D a
House of the Future

Use knowledge of existing
products to design a
functional and appealing product.
Create designs using simple electrical diagrams.
Use knowledge of
techniques and the
functional and aesthetic
qualities of a wide range of
materials to plan how to
use them.
Understand and use
electrical systems in
products.
Use techniques which require more accuracy to cut, shape and join
Evaluate

## Spring Term

Create Housing for a Working Torch

Design a functional and appealing product $f$ Create designs using simple electrical diagrams. Use knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them.
Consider improvements Understand and use electrical systems in products.
Use techniques which require more accuracy Evaluate and assess existing products and own learning

## Cycle Assessment points

- Autumn Term Assessments (December)
- Spring Term Assessments (March)
- Summer Term Assessments (June)


## CEC EYFS + Key Stage 1 Learning Journey: D and T

## Spring Term

The Shang Dynasty/ Our Food Our World - Identify the five types of food that make up a balanced diet

- Understand the important of eating the right amounts of food. - Introduce and identify Vitamins
A, B, C
- Food skills
- Food making

Food Evaluation

Summer Term
Prehistoric Britain/ Villages, Towns, Cities

- Investigate existing products

Understand how mechanical systems such as levers and linkages
or pneumatic systems create mover
Use knowledge erns create movement.
product.
Create a design I using annotated sketches and cross-section diagrams.
Create my animal using reclaimed materials.
Decorate and complete my project to achieve my intend

## Learning journey to continue in KS2



## Summer Term

Significant Sport Stars/ Wonderful Weather Food Technology

- Understand that food is a basic requirement
- Understand that food keeps us healthy and gives us energy to grow
Hygiene
Recipe and skills
Food making
Food evaluation


## Spring Term

Shiver M'Timbers! and Remarkable Robots Make a pirate hat Writing/sequencing instructions to make a hat fit for a pirate. Pirate Cooking Design and make a Robot
Revisit the robot they designed and then write sentences


## Spring Term

Ancient Egypt/ To Exeter and Beyond

Investigate existing products and ask questions. Create simple designs for a product. Use pictures and words to describe outcome Ask simple questions about existing products and those that I have made.
Create a design based on ideas.
Use a range of simple tools to cut, join and combine materials and components safely.

## Summer Term

Draw with increasing complexity and detail, such as representing a face with a circle and including details.

- Use drawing to represent ideas like movement or loud noises.
- Develop their own ideas and then decide which materials to use to express them.


## Spring Term

Start to make marks intentionally.
Explore paint, using fingers and other parts of their bodies, and brushes and other tools.
Express ideas and feelings through making marks, and sometimes give a meaning to the marks they make.

## Summer Term

Explore different materials, using all their senses to investigate them. Manipulate and play with them. Use their imagination as they consider what they can do with different materials.
Make simple models which express their ideas.

## Autumn Term

- Develop manipulation and control.
- Explore different materials and tools.
- Nutrition- encourage children to try a range of foods as they become more independent eaters.


## Autumn Term

- Create closed shapes with continuous lines, and begin to use these shapes to represent objects
Make healthy choices about food, drink, activity and toothbrushing.
Use one-handed tools and equipment, for example, making snips in paper with scissors.


## Spring Term

- Explore different materials freely, to develop their ideas about how to use them and what to make.
Join different materials and explore different textures
- Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different


## Cycle Assessment points

- Autumn Term Assessments (December)
- Spring Term Assessments (March)
- Summer Term Assessments (June)

