

We are  
designers...





# Lower Farm Academy

## Long Term Plan

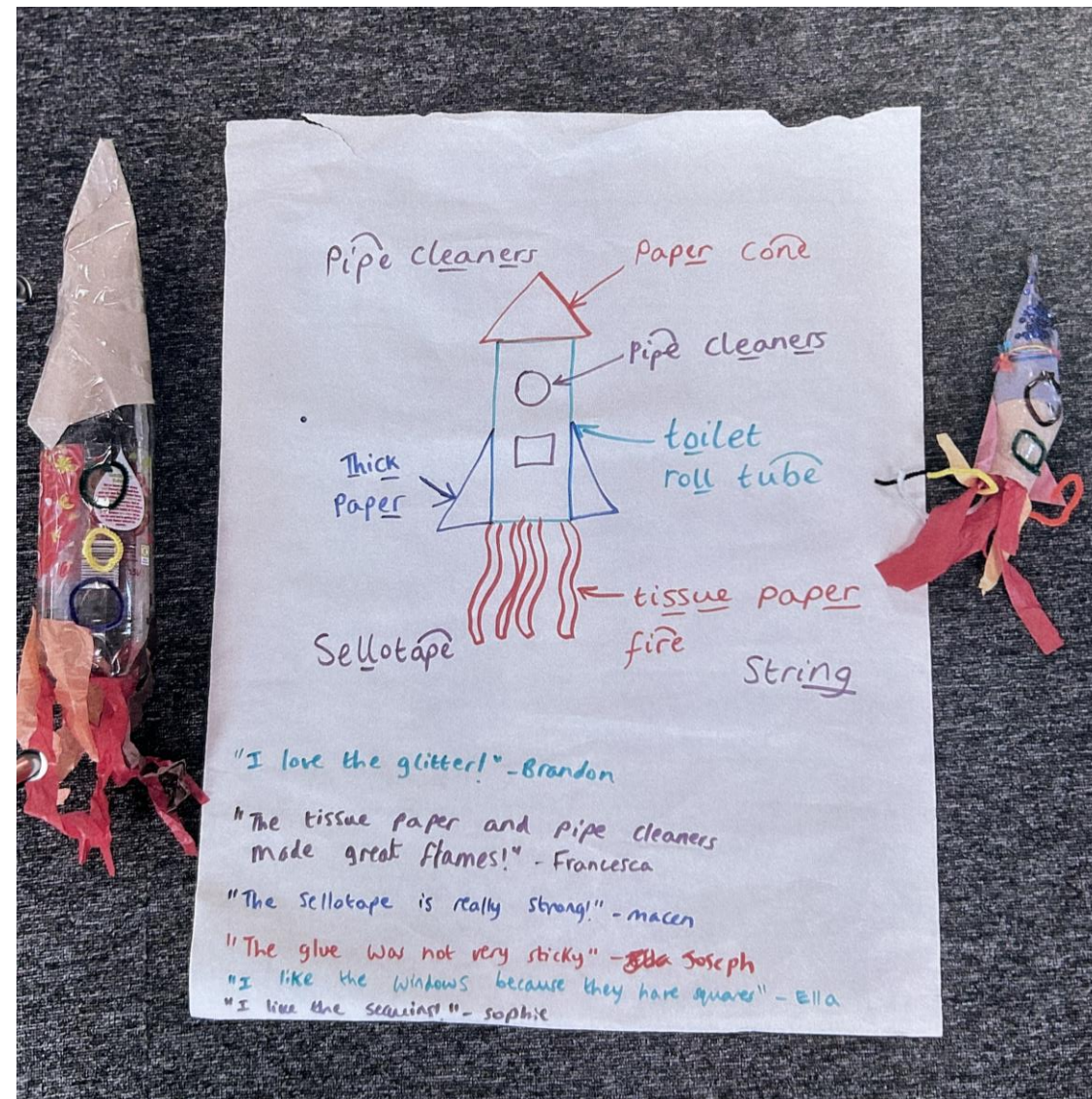
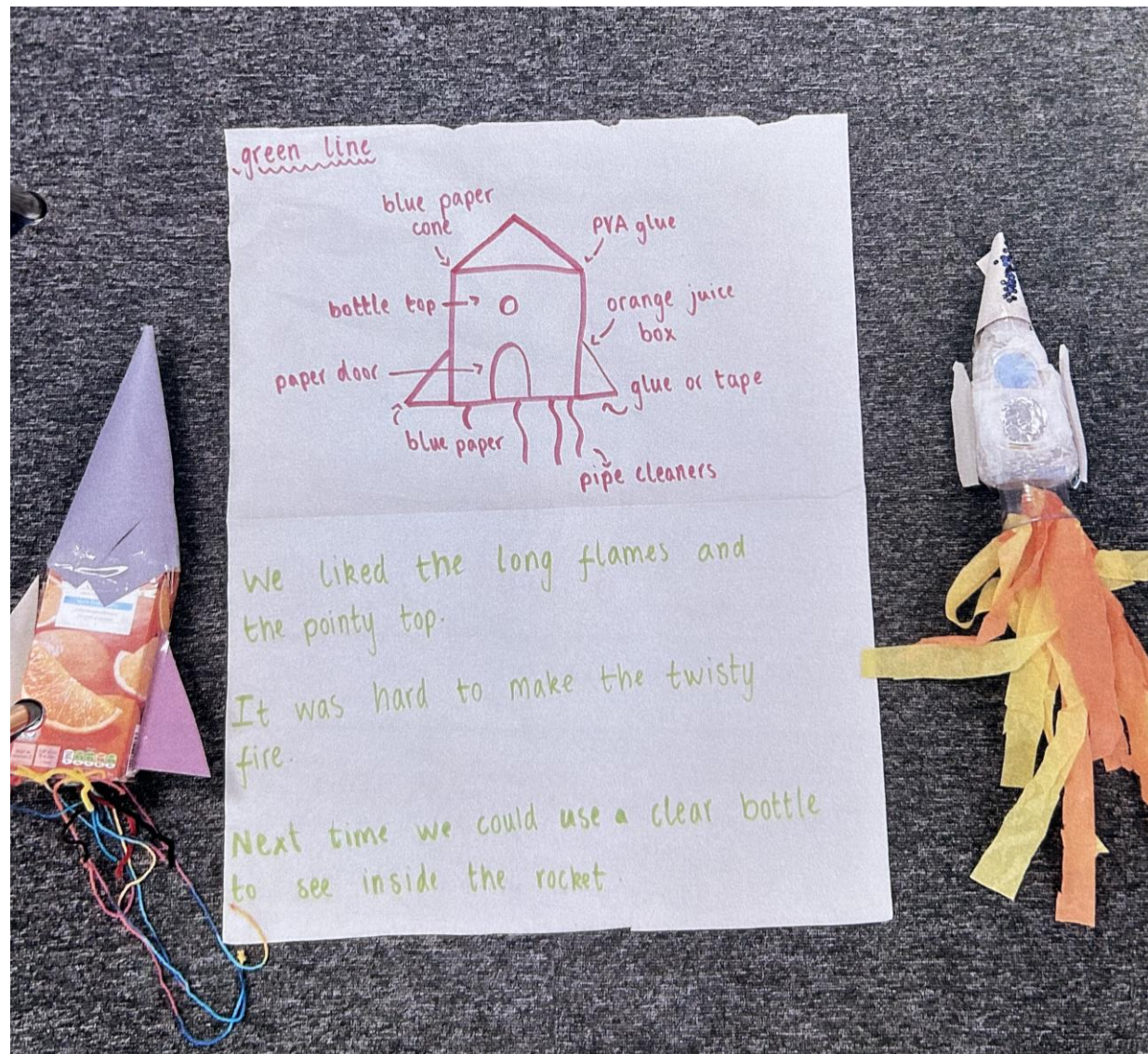
### DT



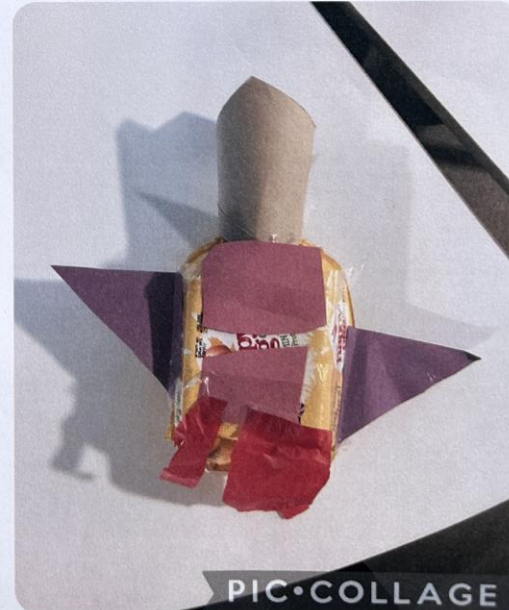
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Reception</b>	It's all about me: Cards and photo frames	Celebrate with me: Stained glass and tissue paper flowers	Farmyard Fun: Split pin animals, house, bridge construction	How does your garden grow? Mini beast hotel	How to be a superhero: Rockets, villain traps and costumes	Oh, I do like to be beside the seaside: Pirate hats, boats
<b>Year 1</b>	Lost and Found: Structure	The Queen's Hat: Mechanisms	Superheroes: Structures	London's burning: Product	Far, Far Away... Mechanisms	Happy Holidays: Food
<b>Year 2</b>	Ocean Adventures: Mechanisms	Time Travellers: Product	Location, Location: Structures	Unsinkable: Product	No Place Like Home: Mechanism	Around the World with the 3 Bears: Food
<b>Year 3</b>	Lost in the Jungle: Structures	What a Saga! Structure	Flying Food Airways: Food	Anglo-Saxon Chronicles: Product	Child of our time: product	Biome in a box: Mechanisms
<b>Year 4</b>	On Top of the World: Food	Secret of the Sarcophagus: Product	Who Pays the Price? Product	Untangling the Greeks: Structures	Eureka! Mechanism	Building Britain: Product
<b>Year 5</b>	Wild, Wild, World: Structure	Law and Order: Product	Crack the Code: Product	Beyond Britain! Food	Magical Mystery Tour: Mechanisms	Globetrotters: Product
<b>Year 6</b>	Abracadabra! Mechanisms	<u>Veni, Vidi, Vici</u> : Structure	Fair Trade? Product	A Prehistoric Puzzle: Product	A Moment in Time: Food	The Railway Children: Mechanisms



# Reception





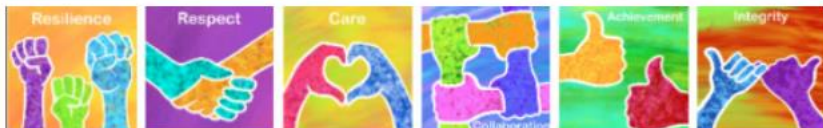


# We are designers.



## VOCABULARY

map	plan
3d	structure
materials	construct
shape	technique
stabilise	stiffen



## Year 1

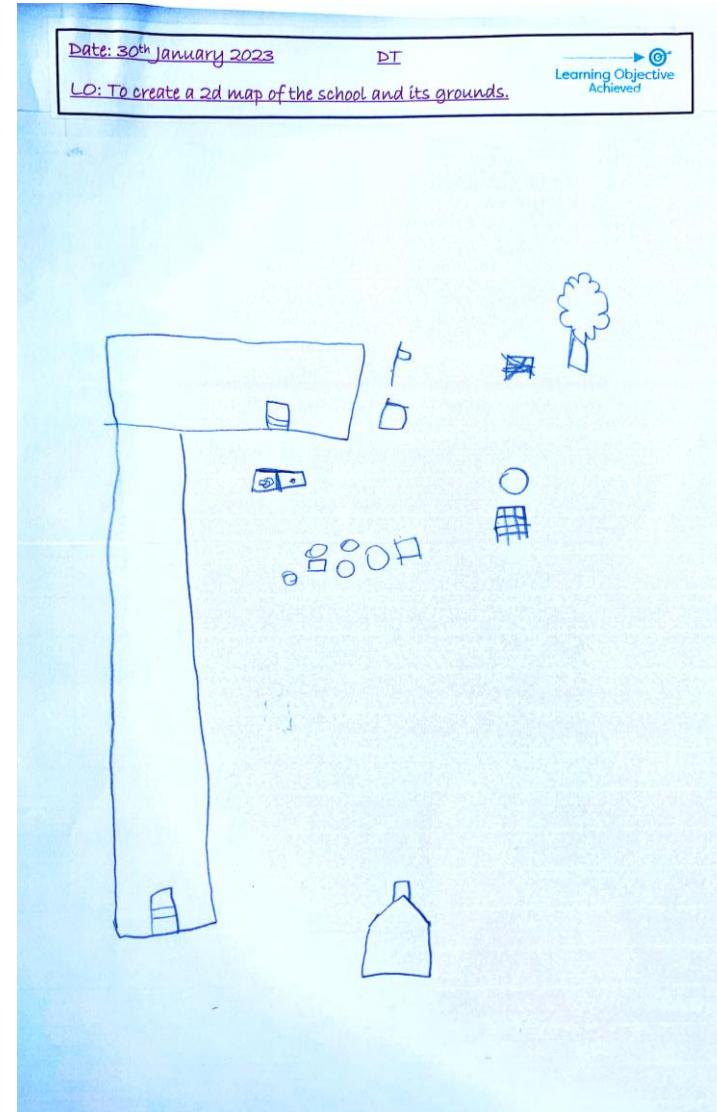
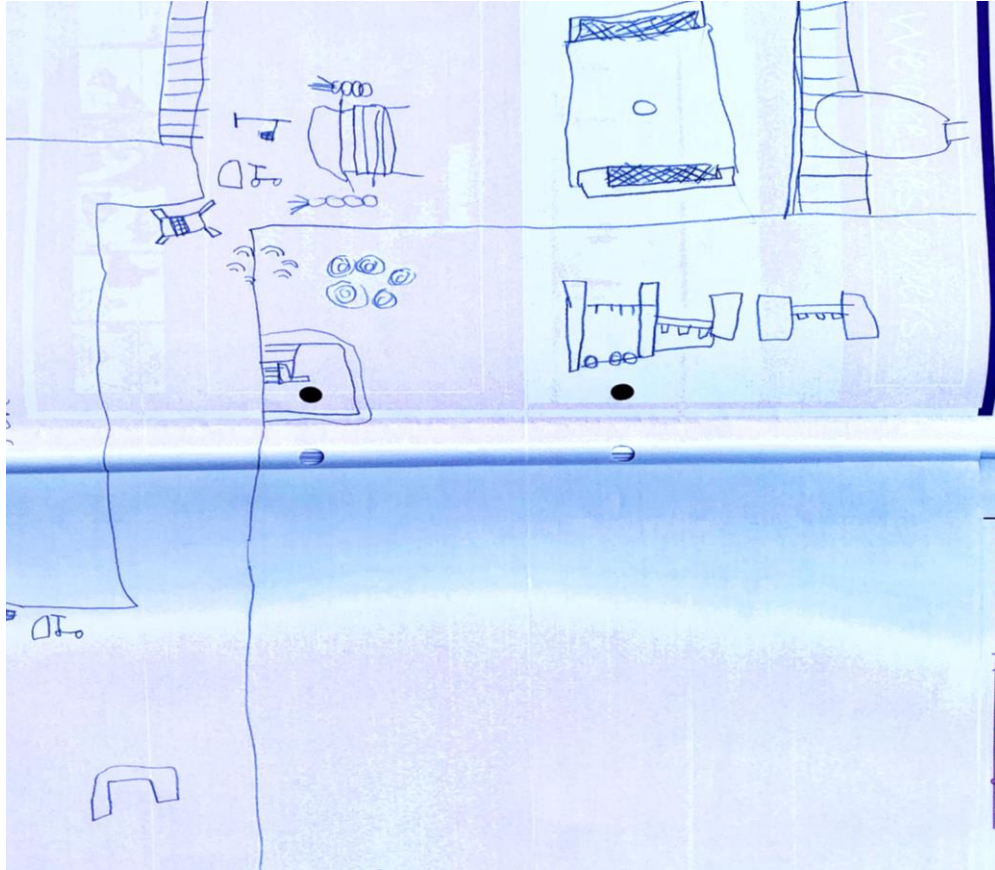
### Design brief:

Some superheroes are looking for a venue to hold their superhero training camp.

Can you create 3d maps of the school, and its grounds, so that they can see if our school is suitable.

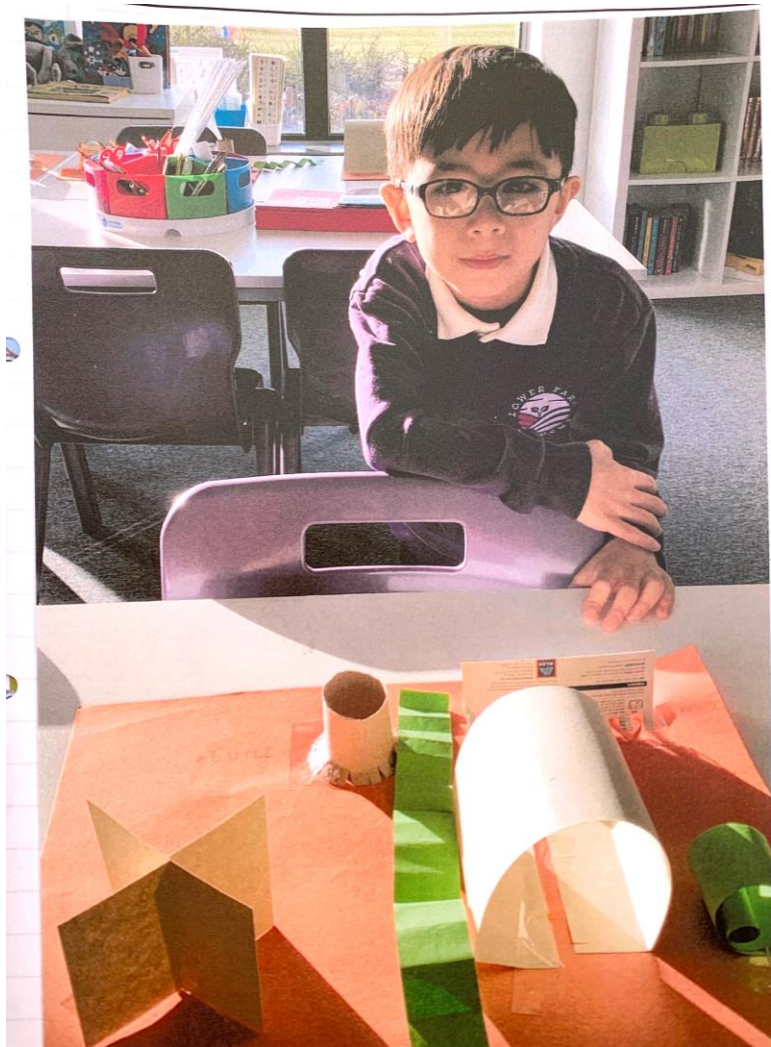














# We are designers.



## VOCABULARY

design	product
tools	purpose
material	mechanism
construct	stable
stiffen	flexible



## Design Brief.



The wind has disappeared but, somehow, we need to get the Queen's hat to be able to travel across London.

Your challenge is to design and build something that can carry the Queen's hat on its journey.



## My Design



I am going to make a car

Draw and label your design



I will need:

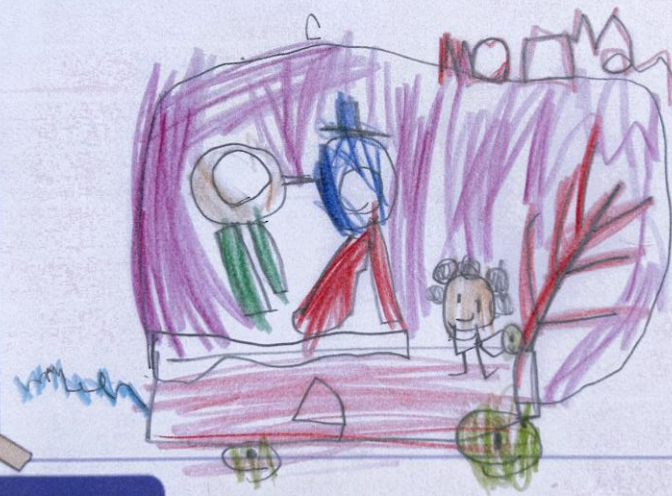
- box ✓
- feather ✓
- scissors ✓
- lolly stick ✓
- tape ✓
- hole punch ✓
- split pins ✓
- pipe cleaners ✓

## My Design



I am going to make a car

Draw and label your design



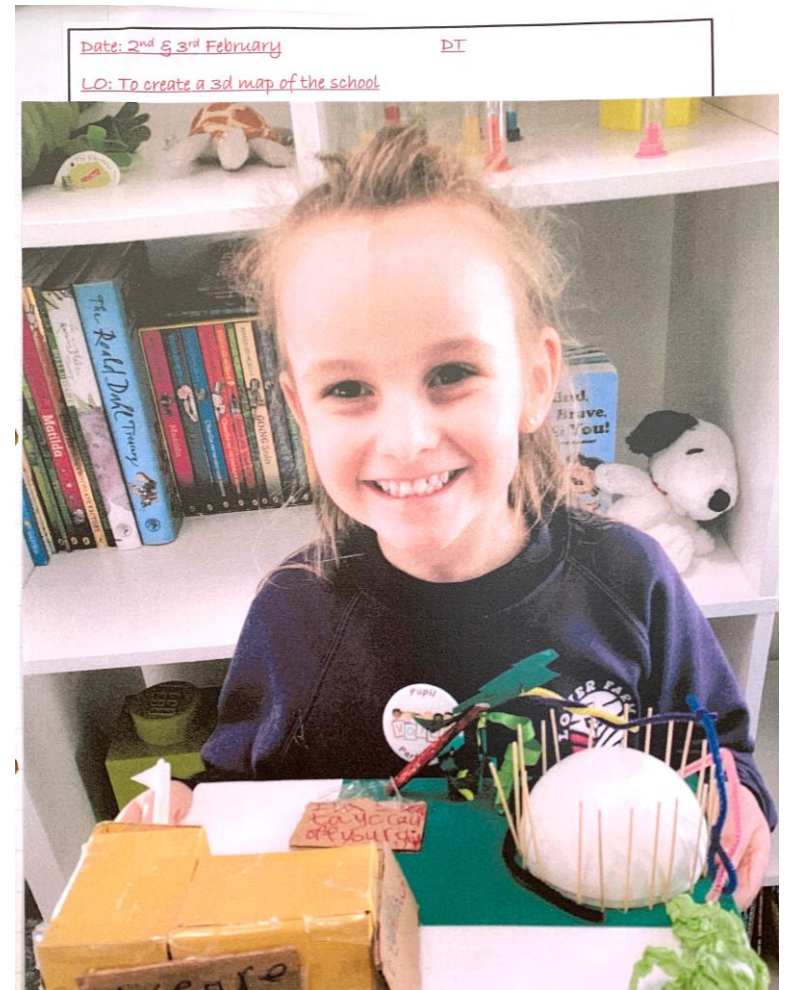
I will need:

- box ✓
- feather ✓
- paper ✓
- string ✓
- tape ✓
- hat ✓
- wheels ✓





... create a 3d map of the school





# We are designers.



## VOCABULARY

Equipment	Create	Design
Tools	Structure	Materials
Building	Cut	Join
Stabilise	Evaluate	Stiffen
Strengthen	Construct	Shape

## Lesson Objectives

- To design a house that is purposeful, functional and appealing.
- To build a house, exploring ways to stiffen, stabilise and strengthen.
- To select from and use a wide range of tools, materials and equipment to perform practical tasks.
- To evaluate own ideas and designs against given design criteria.



# Year 2

## Design Brief

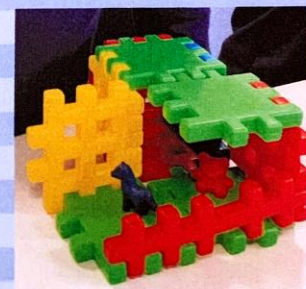
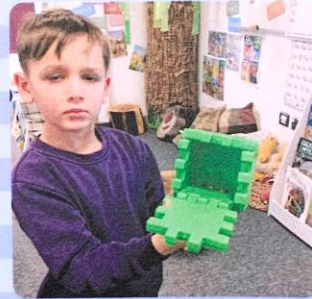
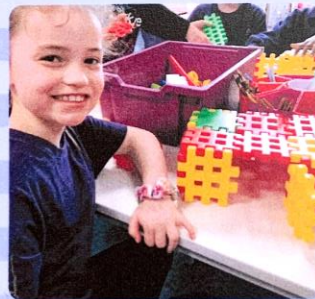
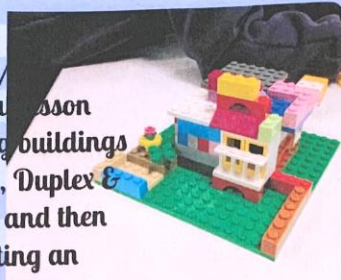
Toby the Town Mouse and Pippin the Country mouse need your help! A terrible storm ruined their homes and they need you to build them a new home each.

**Your house must:**

- Look appealing.
- Have a strong and stable structure.
- Be built from a range of materials.



3/2/  
Practical lesson  
constructing buildings  
out of Lego, Duplex &  
Marionex and then  
completing an  
evaluation.



PIC-COLLAGE





30/1/2023

Design and Technology

Working towards  
Learning Objective

L.O. To design a house that is purposeful, functional and appealing (against the design brief criteria).

(I)

## My Design

What are you making?

[we are hoes.] we are making hoes.

What will your house look like?



Who is your house for?

The centre mouse.

How will you join your structure together?

with glue and tape.

How will you make sure your structure is strong and stable?

With glue and strong tape.

What tools will you need?

I will need to use card, lollipop sticks, and glue.

What materials will you use? Why?

I will use lolly pop sticks, I'll use getters. I'll use a tape.

DT - Emerging  
Year 2 - Elm Class

30/1/2023

Design and Technology

Working towards  
Learning Objective

L.O. To design a house that is purposeful, functional and appealing (against the design brief criteria).

(I)

## My Design

What are you making?

A house A. we we are mad making a house.

What will your house look like?



Who is your house for?

The town town mouse

How will you join your structure together?

Glue stick and masking tape / celltape.

How will you make sure your structure is strong and stable?

To make make it stable.

What tools will you need?

glue gun  
scissors  
celltape celltape  
classic bands

What materials will you use? Why?

I will use pipe cleaners, lolly pop sticks, straw, getters and pom poms, card board and card.

There is they work keep perfectly pretty well.

DT - Expected  
Year 2 - Elm Class



3/2/2023



Design and Technology

Learning Objective  
Achieved

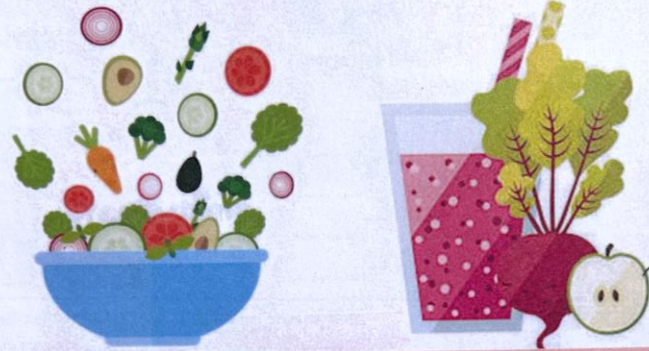
L.O. To evaluate own ideas and design against the design criteria.



1.2.23 - Building our houses.



# We are designers.



## Design Brief

Your task is to create a salad and / or smoothie that uses as many seasonal fruit and vegetable ingredients as possible.

If you use other ingredients, you must find out where they are sourced from.

## VOCABULARY

seasonal	ingredient	chop	slice
grate	dice	cube	blend
source	mix	whisk	stir
pour	drizzle	fruit	vegetable



## Year 3



## DESIGN TECHNOLOGY



Apply understanding of seasonality and its links to ingredients

LO: Research and analyse existing salad and smoothie recipes



Think about seasonality and a healthy, varied diet.

1. What did you notice about the recipes in terms of seasonality?
2. What did you notice about the recipes in terms of a healthy, varied diet?

Most of the ingredients are grown in Summer and only a few can be grown in winter. The winter salad had more seasonal winter ingredients like squash and pear and beetroot.



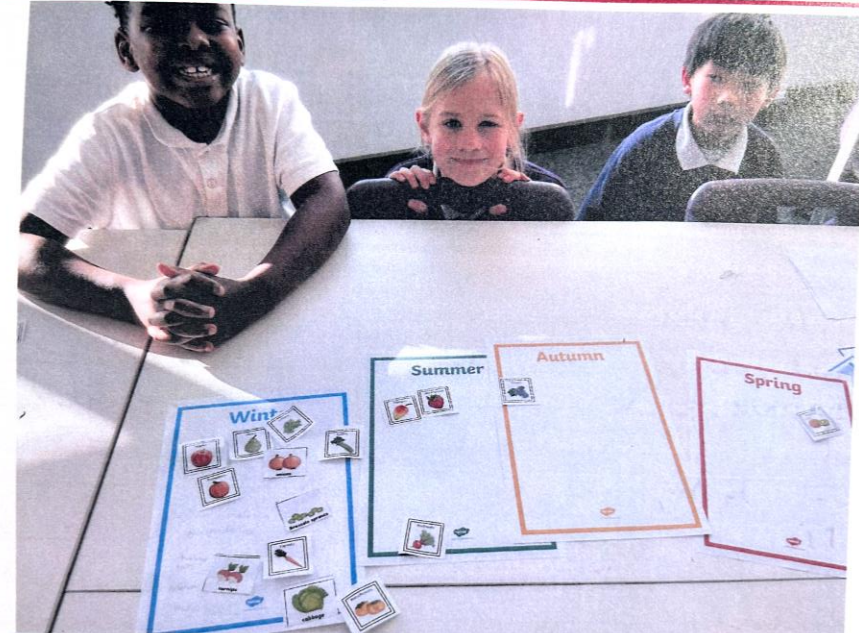
20.01.23

## DESIGN TECHNOLOGY TASK 1.



LO: To understand seasonality and identify seasonal ingredients

1. Write a summary of what seasonality means and why it is important.
2. Did you notice or find anything interesting or that surprised you?



It is about the food that grows at different times of year like Spring, Summer, Autumn and winter and when it's at its best quality.

It's important because we will get the best quality food and it's better because for the environment <sup>sp</sup> because it does not use gas.

sp

environment



## My Smoothie



Ingredients:

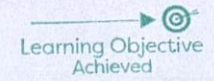
apple ✓  
 pear ✓  
 Avocado ✓  
 Straw berrys ✓  
 Kale ✓  
 Cramberry juse ✓  
 cherry -seasonal..

yes, because there's not  
 a lot of fresh fruit at this  
 time ✓ You have found a few

1. Write your ingredients list
2. Colour code seasonal and any non-seasonal ingredients:  
☐ Seasonal  
☐ Non-seasonal
3. Have you had to include some non-seasonal ingredients? Why have you done this?

01.2023

DESIGN TECHNOLOGY



LO: To design a seasonal salad and smoothie

## My Salad



Ingredients:

Cucumber  
 tomatoes  
 carrot  
 Salad Leaves  
 Cabbage  
 pumpkin  
 Kale  
 apple (large)  
 parsley ✓

Yes, because  
 there's not a  
 lot of seasonal  
 salad ingredients.  
 You have made  
 a great seasonal  
 recipe!

1. Write your ingredients list
2. Colour code seasonal and any non-seasonal ingredients:  
☐ Seasonal  
☐ Non-seasonal
3. Have you had to include some non-seasonal ingredients? Why have you done this?



10/02/2023

Learning Objective  
Achieved

LO: To test, analyse and evaluate a finished product (seasonal salad and smoothie)



What worked well:

The apple juice because it made it  
really sweet. I liked the carrots roasted  
and grated. ✓



What could be improved / what I found a challenge:

The chopping because it was really  
hard and we only have safety  
knives. ✓



What I will try next time to improve or try something new:

add a little bit more apple. ✓



# We are designers.



## VOCABULARY

Explore Design Evaluate Analyse Suitable

Materials Brief Durable Adhesive

Streamlined Replica Longship

## Design Brief

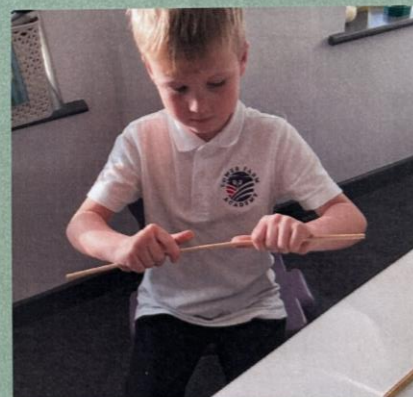
You have been tasked with creating a replica Viking Longship to be displayed in the Viking Gallery at Tamworth Castle.

It must be a working replica, that can be used to demonstrate the Viking journey and how the longships worked.

You will test your designs and race them once complete.







We explored  
different materials  
to use for our  
longboat and  
decided which  
would be the best.



PIC•COLLAGE



28/11/2022

## DESIGN & TECHNOLOGY

LO: To explore and select materials appropriate for a task

My materials need to:

- be waterproof, and durable to weather and time
- be flexible / able to give a streamlined shape
- balance on water

- move on water
- replicate a Viking longship
- be as environmentally friendly as possible



Jumbo wooden sticks

Pros:  
breakable  
snaps easy  
cons:  
Waterproof  
strong



Bamboo canes

Pros:  
Not flexible  
move on water  
cons:  
Waterproof  
balance on water



Plastic bottles

Pros:  
Not flexible  
Waterproof  
cons:  
replicate a Viking longship



Plastic bags

Pros:  
easy to break  
tear easily  
cons:  
can quickly float



Paper cups

Pros:  
Not as waterproof  
leakable  
cons:  
flexible



Thin wooden sticks

Pros:  
Waterproof  
breakable  
cons:  
move on water



Square cloth pieces

Pros:  
smooth  
tearable  
cons:  
soft  
scriming as possible



Cardboard

Pros:  
rippable  
bendable  
cons:  
be as environmentally as possible



Paper straws

Pros:  
squishy  
bendy  
cons:  
flexible



Plastic straws

Pros:  
bendy  
Waterproof  
cons:  
flexible

28/11/2022

## DESIGN & TECHNOLOGY

LO: To explore and select materials appropriate for a task

My adhesive needs to:

- be waterproof
- durable to weather and time

- stick/attach a range of materials together
- provide a neat finish



Cool melt glue gun

Pros:  
gooey  
slimy  
cons:  
Provide a neat finish



Plasticine

Pros:  
Stretchy  
hard  
cons:  
Sticky  
Waterproof



Cable ties

Pros:  
flexible  
durable to weather and time



Tape

Pros:  
sticky  
strong  
cons:  
Provide a neat finish



String

Pros:  
long  
strong  
cons:  
flexible



Fishing wire / wire thread

Pros:  
Strong  
spiky  
cons:  
Waterproof



28/11/2022

## DESIGN & TECHNOLOGY

LO: To explore and select materials appropriate for a task

My adhesive needs to:

- be waterproof
- durable to weather and time

- stick/attach a range of materials together
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Cool melt glue gun

Pros:  
gooey  
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Provide a neat finish



Plasticine

Pros:  
Stretchy  
hard  
cons:  
Sticky  
Waterproof



Cable ties

Pros:  
flexible  
durable to weather and time



Tape

Pros:  
sticky  
strong  
cons:  
Provide a neat finish



String

Pros:  
long  
strong  
cons:  
flexible



Fishing wire / wire thread

Pros:  
Strong  
spiky  
cons:  
Waterproof





28/11/2022

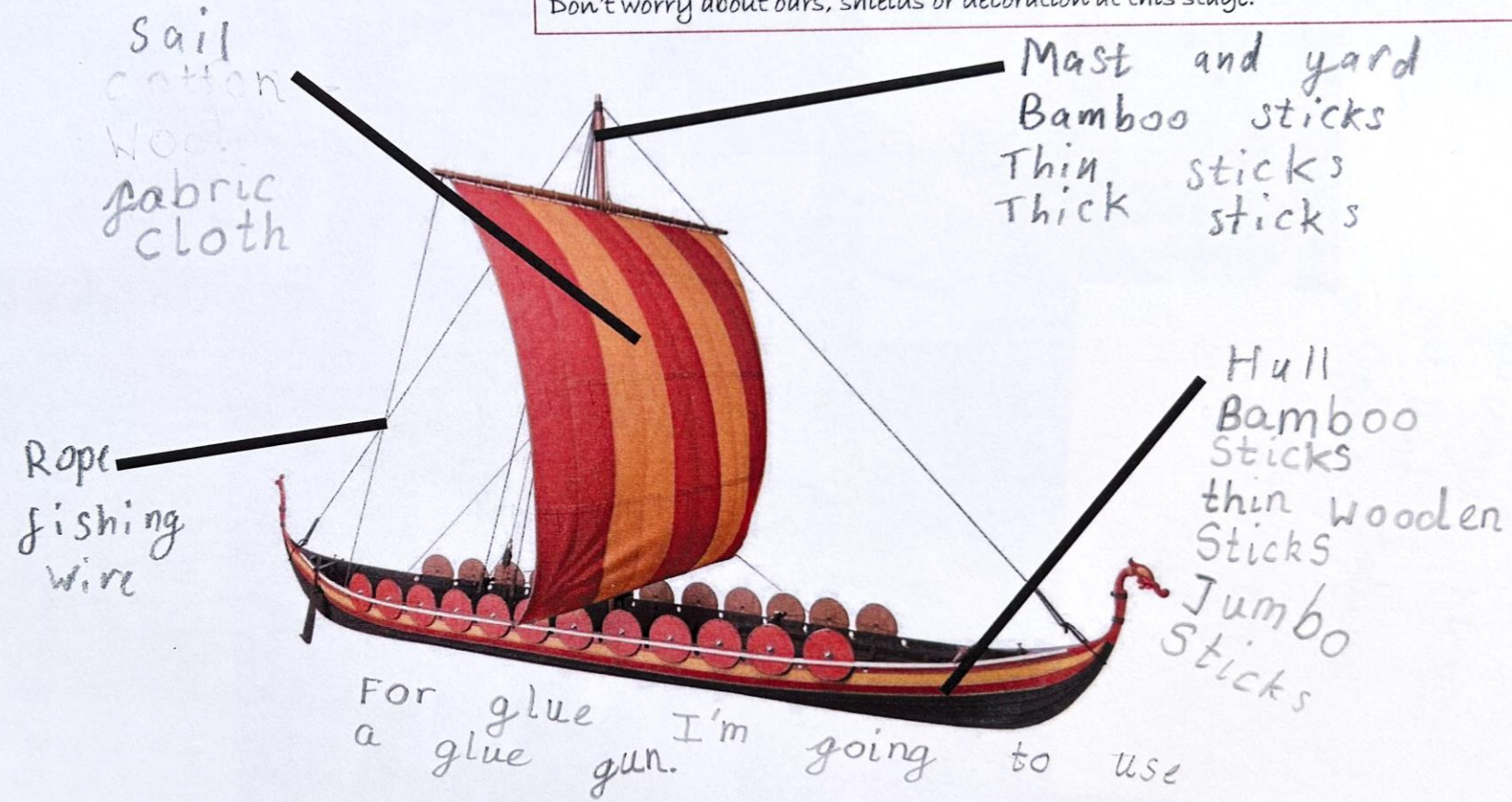
## DESIGN & TECHNOLOGY

LO: To design a replica Viking Longship

Refer back to the diagram of a Viking Longship.

Complete your diagram below to show what materials you will use for each part and the adhesive to attach it.

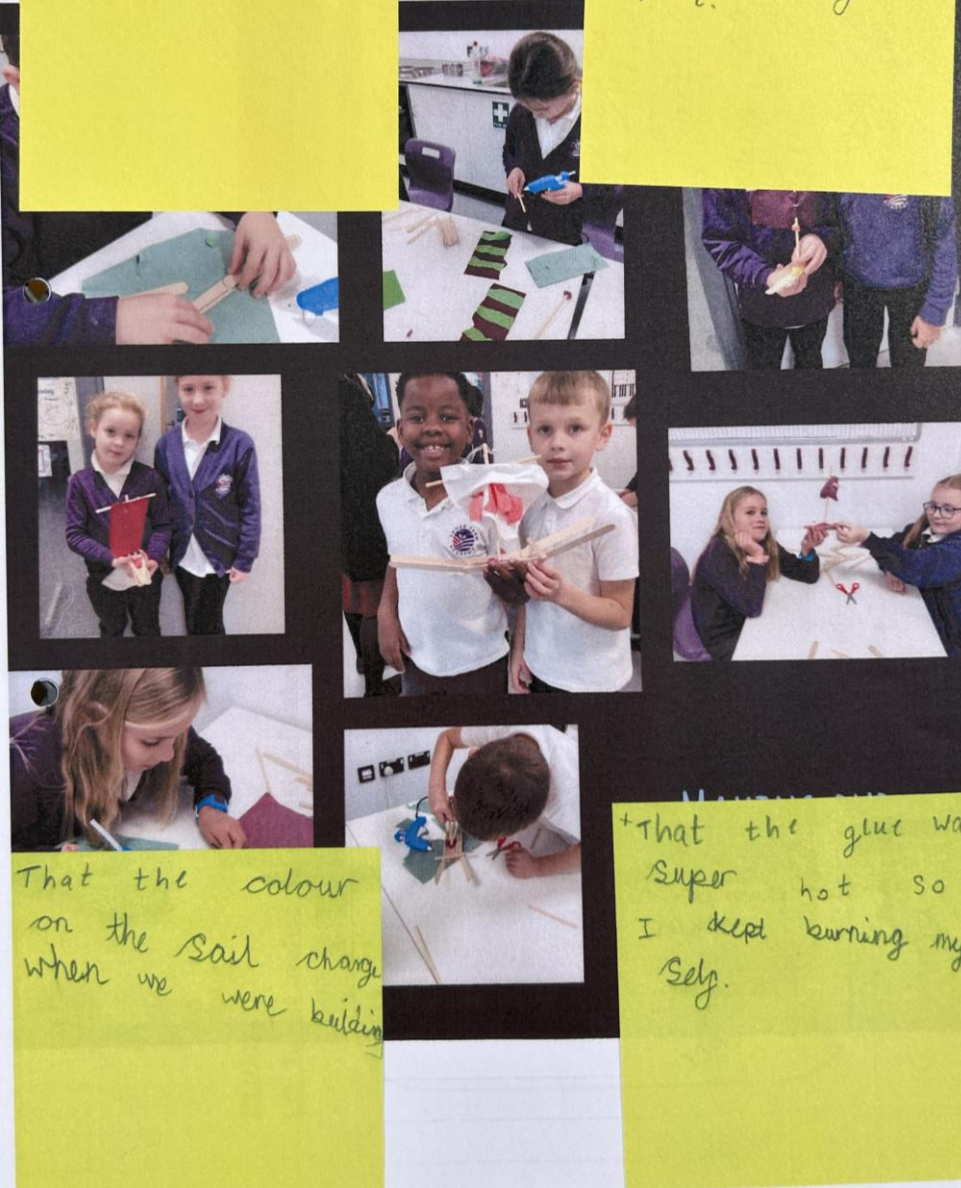
Don't worry about oars, shields or decoration at this stage.





The stickin worked well because it was strong and it would dry quicker.

It was kind of stressful because it kept falling apart.



That the colour on the sail change when we were building.

\*That the glue was super hot so I kept burning my self.

2/12/2022

LO: To test, analyse and evaluate a finished product (Viking Longship)



My finished Longship Replica

Improvements I could make:

That fixing the sail up more sticks on one both sides of the boat. Also, ~~building~~ fixing fixing fixing the hull.

What worked well:

Nothing worked well because it kept falling on it's side. It kept falling on it's side because we didn't have a flat surface on the hull but the sides were fine.

What I found challenging:

Blowing the sail. Blowing the sail was hard. I found challenging that making it stand in the water was challenging.

What I had to change during production:

changing the hull while building. changing the sail of colours.