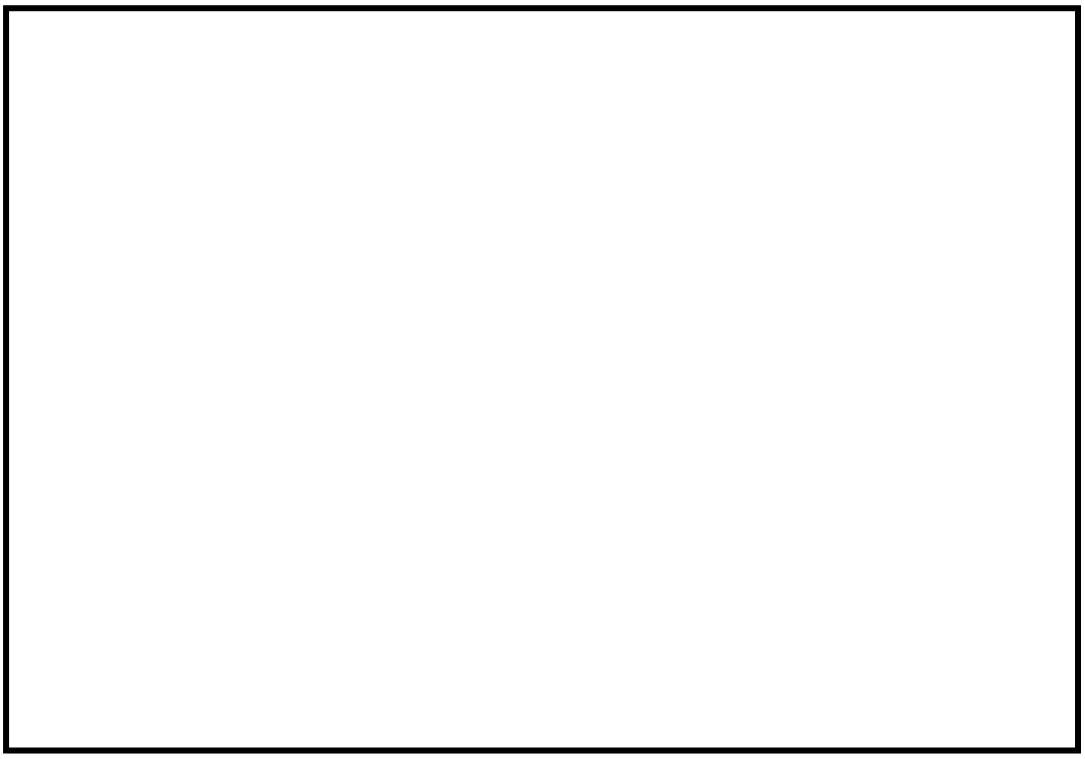
Year 4

Design Technology

3D House

In this unit, we will research different types of 3D homes, look at what a net is, practise drawing nets for houses and design and make our own house to make a class village.



My learning for this topic:

I = Independent TS = Teacher Support AD = Adult Directed

Learning Objective	AD	TS	I
Can I identify different types of nets and state what 3D shapes they make?			
Can I understand how boxes are made up, designing nets that will make 3D shapes.?			
Can I design and develop a product to meet a design brief?			
Can I select appropriate materials to use to make my box whilst also selecting other materials to make the product attractive in appearance?			
Can I evaluate my ideas against the design criteria and consider improvements to my work?			
Can I select and use a range of tools to aid me in cutting, sticking and creating my home?			

New Vocabulary

Net: A pattern that you can cut and fold to make a model of a solid shape.

Tab: Fold on the edge of a net used to stick the net together to make a 3D shape.

Design: A plan or drawing produced to show the look and function of a product before it is made.

Evaluate: State what you think about something, giving reason why you like or dislike that design.

Prototype: Make a model to test the design before the final product is made.

Scale: How big or small the drawing is. Normally talks about if the drawing is drawn as large or small as it would be when made.

Stick in class mind map

What I already know in one colour

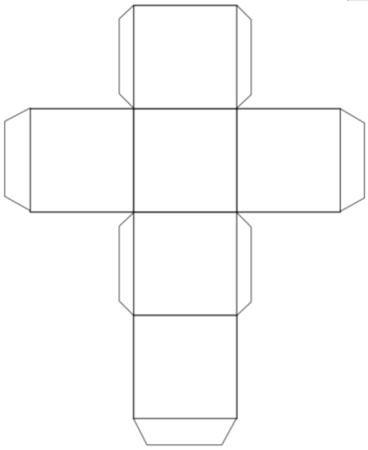
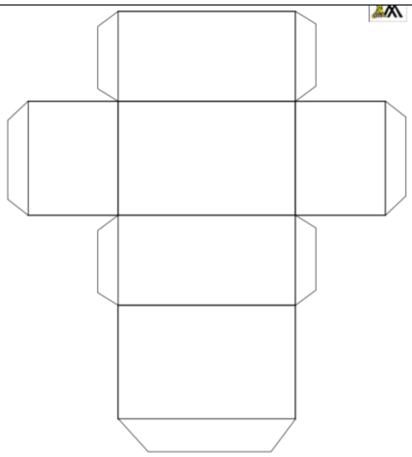
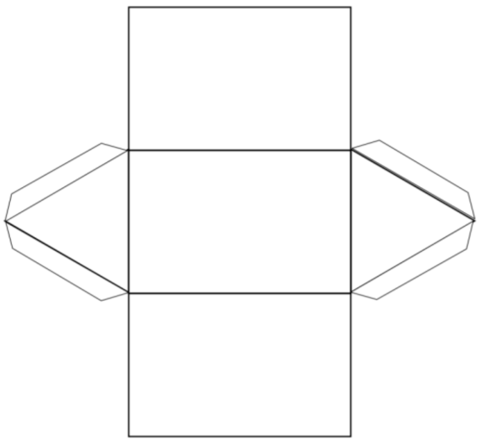
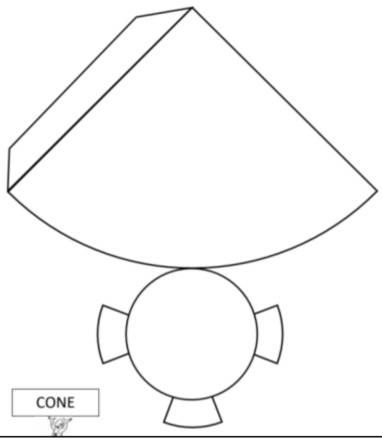
What I want to know in another colour

Children to tick off/add to around the edge as appropriate

Norman Foster
1935

NORMAN FOSTER is an architectural phenomenon; responsible for a dozen or more of the key buildings of the last 30 years, but also as the founder of perhaps the most financially successful architectural practice of modern times.

Research - Looking at Nets

	What is the name of the 3D shape that this net will make? ________________________________ How many tabs does this net have? ________________________________ What part of a house could this net be used for? ________________________________
	What is the name of the 3D shape that this net will make? ________________________________ How many tabs does this net have? ________________________________ What part of a house could this net be used for? ________________________________
	What is the name of the 3D shape that this net will make? ________________________________ How many tabs does this net have? ________________________________ What part of a house could this net be used for? ________________________________
	What is the name of the 3D shape that this net will make? ________________________________ How many tabs does this net have? ________________________________ What part of a house could this net be used for?

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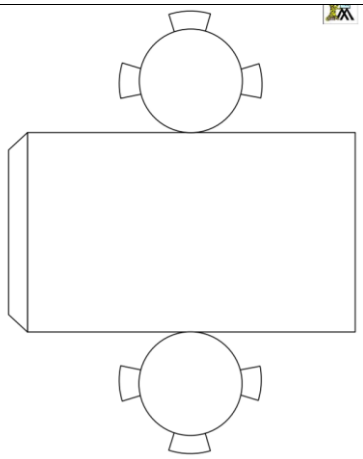
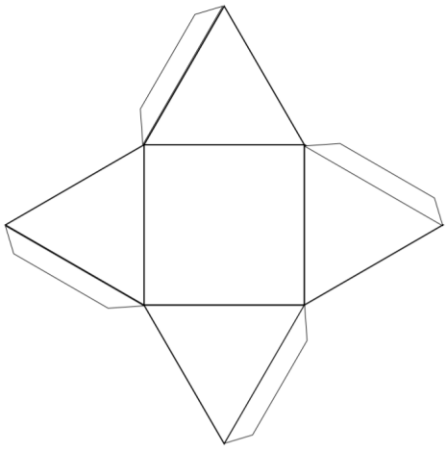
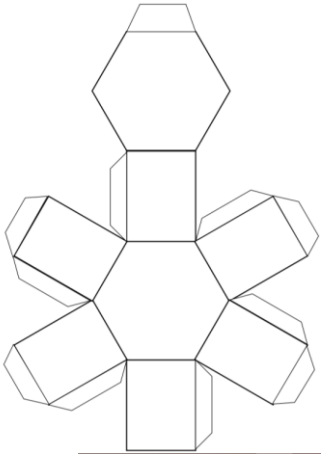
	What is the name of the 3D shape that this net will make? _____ How many tabs does this net have? _____ What part of a house could this net be used for? _____
	What is the name of the 3D shape that this net will make? _____ How many tabs does this net have? _____ What part of a house could this net be used for? _____
	What is the name of the 3D shape that this net will make? _____ How many tabs does this net have? _____ What part of a house could this net be used for? _____

Looking at Nets

Pick a net that you might use for your house design. Draw the **net** making sure that you are careful with the **size of the net**. Make sure you use a **ruler.**

How many **faces** does the shape have?

.....

Does the net have **tabs**? How many?

.....

How many **folds**?

My Package Design

Design criteria: To design a small 3D house to make a village. Use different nets and designs to make the 3D shape or shapes look like a house.

What size is my house going to be?

How many different nets will be used to make the final house?

How are you going to make it look attractive? (Colour, Pictures, Window?)

To make a 3D house I will need the following items.

I will need:

Design Research - Homes

My Design – Idea 1

The main net of my house will look like (Measurements not to scale):

What the finished house will look like:

My Design – Idea 2

The main net of my house will look like (Measurements not to scale):

What the finished house will look like:

Testing my Design

Draw the net you have designed on a piece of paper. Cut out the net to see if it works. This is your prototype.

Do you need to change anything about your design? What do you need to be careful with?

……

……

……

……

Draw your net again and label with the measurements you will use in your final product:

Evaluation

When I made my design these are the things I was pleased with.....
.....
.....

My favourite thing about my house is
.....
.....
.....

These are the things I would change next time
.....
.....
.....
.....
.....
.....

I would give my house 1 2 3 4 5 for meeting the design brief

I would give my house 1 2 3 4 5 for its net

I would give my house 1 2 3 4 5 for presentation and overall finished look