

Design Technology Year 4 Christmas Gift Boxes Autumn Term

Prior Learning: Children will have: learned about how to strengthen materials.

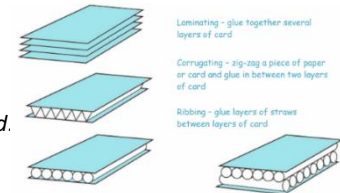
What are gift boxes?

Gift boxes are used on special occasions to contain and protect the gifts they hold. They are designed to both look attractive and keep the item inside safe. They come in a variety of shapes and sizes dependant on the size and the shape of the gift they have in them.



4. TWAL: methods of reinforcing card.

Now we know how to create our shell structure, we will learn methods of stiffening and strengthening our shell structures. We will practise these methods and to carry out tests to find out where their structures might need to be strengthened. Methods of reinforcing include folding and shaping, corrugating, ribbing and laminating.



1. TWAL: about different types of packaging and gift boxes.

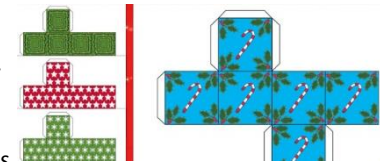
We will learn more about the construction of gift boxes in a range of shapes and sizes, and consider what the purpose and effectiveness of each one is. Is it used for protecting, containing or presenting? We will look at the decoration of the box and start to think about what print we might use.



Most boxes are made using 2D shapes joined together to make a shell structure called a net.

5. TWAL: To plan our gift box.

Using all the information we have generated over the weeks, we will create a detailed plan of how we intend to create our final gift box. We will make sure to include the print we intend to decorate the outside with, as well as measurements for our net, fold lines, an equipment list and the method of reinforcement we intend to use. Measurements will help our design stay accurate.



2. TWAL: about how a range of packaging is made.

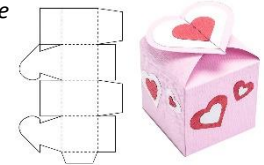
We will try today to answer a range of questions about the construction of gift boxes such as 'How has it been constructed?' 'How has it been stiffened (i.e. folded, corrugated, ribbed, laminated)?' We will take apart some boxes and identify the 'net' of the box. This will help us generate some ideas about how it is made. We will identify the different materials that each one is made with. We will look at the joins and identify the tabs used to secure the shape.



Boxes or nets will generally have tabs which join one section to another.

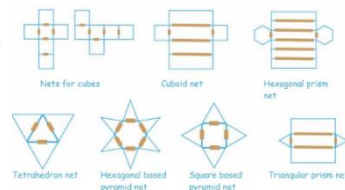
6. TWAL: To create and evaluate our gift box.?

Using our plans, we will create our final product, ensuring that we choose the best order to complete each element of construction in. We will test our product out by putting a 'gift' inside to see if it has worked. One we have done this; we will evaluate our final product. Does it fit our original brief? Did it fit the gift inside it? Will it keep it safe? Did we manage to reinforce it successfully?



3. TWAL: To use nets to create 3D shell structures.

We will use kit parts with flat faces to construct nets. We will practise making nets out of card, joining flat faces with masking tape to create 3-D shapes. Experiment with assembling in nets in numerous ways. We will learn how to use scissors to score card to bend it more easily during assembly. We will use all this knowledge to make a simple box and lid.



Words we will know!

