

Willerby Carr Lane Primary School – Design and Technology

Topic: Photograph Frames

Year: 3

Strand: Structures

What should I already know?

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What will I know / be able to do by the end of the unit?

What are freestanding photograph frames?	<ul style="list-style-type: none"> • Freestanding photograph frames stand up on their own, without support or attachments. • Printed photographs usually go inside. • Different types of frames display photographs in different ways – ‘windows’ can be different shapes, although these are most commonly rectangular. • Most commonly, people have photographs of loved ones in their frames and have them displayed in their house.
Why is it important for structures to be stable and what are the different ways to strengthen them?	<ul style="list-style-type: none"> • Structures need to be stable for durability, to maximum space, for aesthetic reasons and for safety reasons. • It is important structures are stable to stop them falling over. • Some products have a wide base, whereas some use the support of legs (e.g. tripod). • Certain materials are more stable than others. In terms of a photograph frame, wood would be more stable than paper/card, however the paper/card can be strengthened in a variety of ways. • Masking tape, paper clips and PVA glue can be used to strengthen structures.
How can we successfully evaluate existing photograph frames to support the designing of our own?	<ul style="list-style-type: none"> • When evaluating photograph frames, it is important to identify: <ol style="list-style-type: none"> 1. How the frame is able to stand up 2. How the photo is inserted 3. What kind of picture the frame is for 4. How well the frame displays the photograph 5. Who would use the frame 6. Where the frame could stand
What should we consider when designing our frames?	<ul style="list-style-type: none"> • Children could use wood, cardboard or paper/card. • A piece of card/paper can be attached to the back of the structure to allow a photo to slip in. • A thick wooden structure could stand by itself, however some structures may require legs to free stand.
How can we decorate our photograph frames?	<ul style="list-style-type: none"> • All photograph frames will be using natural resources. • Natural resources could include leaves, grass, twigs, daisies, tree bark etc.

Vocabulary

Designing

aesthetics	The consideration of how the final product will look.
choice	The decisions made in the designing process.
component	The different parts of the photo frame.
decoration	Materials used to make the photo frame more appealing.
natural resources	Materials that have not been made by humans/artificially, e.g. tree bark, twigs.
purpose	What the photo frame will be used for
quality	A good quality photo frame is one that has an overall appealing look and stable components.
user	The person who the photo frame is being made for.
Making	
attaching	Connecting the components together.
cutting	The action of cutting something.
finish	The final, complete product.
layering	The inside layer will be the structure and the outside layer will be the decoration and the card used to allow a photo to slip in.
measuring	Identifying the lengths of the structure.
order	The order in which the photo frame will be designed, made and decorated.
rolling	A technique used to strengthen paper.
Knowledge and understanding	
distance	The amount of space between the parallel lines of the frame will need to be measured to ensure an appropriate photo can fit. When decorating, the overlapping of resources hiding the window will need to be considered to ensure the photo can still be seen.
durability	How strong, tough, hard-wearing and resistant an item is.
frame	The structure that will hold together the finished product.
free-standing	An item that can stand on its own without support or attachments.
thick	A thicker base will help stabilise the photo frame.
thin	A thin base may destabilise the frame which could result in needing additional components to help stability.

Key Design Decisions & Skills

- Children will need to identify which material they will be using to create a strong, stable photograph frame
- They will need to decide on the shape of their frame, i.e. square, rectangular, circular, and how they can manipulate their materials to achieve their desired shape. Children will need to make sensible decisions, i.e. using wood for a circular shaped frame would not be possible.
- When creating frames, children who have decided to create wooden structures will need to take caution when using saws and will need to be shown how to hold/use these correctly. Children who have decided to use paper/card will need to decide how they will be strengthening these materials to create a strong, durable photograph frame.

Tools and Resources

- Card/paper
- Cardboard
- Wood
- Saw
- PVA glue
- Scissors
- Hot glue/cold glue/wood glue/copydex (awaiting confirmation)
- Triangular corner bases
- Natural resources

Pictures



making flimsy paper stiffer

