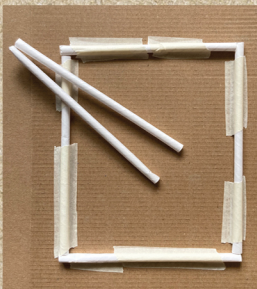


ART SHAPED

SUSTAINABLE 3D ART
PROJECTS TO KICKSTART
CHILDREN'S CREATIVITY



DARRELL WAKELAM

BLOOMSBURY

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FOREWORD



Art has always been the constant for me.

As a young boy I was captivated by it and willingly allowed it to chart the course of my life. In drawing I found a way to express myself and the key to escaping. Stuck indoors with only a pencil for company I would cross vast oceans, travel back in time, explore the depths of my imagination and journey to the furthest stars. I drew anything and I drew everything, I drew strength from my ability, and I drew others closer to me. I chased down techniques and swallowed up ideas, carefully keeping within the lines while pushing every boundary before me.

As a young man I was given the opportunity to use my creativity, a chance to unlock minds and unearth hidden talents. I worked creatively with many thousands of children and young people in a beautiful and empowering environment called Ingestre Hall. A powerful place where children could lose themselves in 'The Arts' and at the same time find their voices. Over time I added a further dimension to my work, quite literally. I carved out a career and created a niche, gradually honing my craft and carefully sticking every vital piece into position.

With experience comes realisation, the joining up of dots. I came to the conclusion that throughout those endless hours, a lifetime spent wrestling with shapes, art had been shaping me. Weaving a richer tapestry, moulding my decisions, and unfolding a more colourful future. Forever drawing me out of my shell.

And then suddenly everything stopped. In 2020, all of those precious connections unravelled overnight. Like many, facing a unique isolation, I found myself reflecting. With an uncertain future, the past became both a comfort and an inspiration, and I began to rediscover my passion. Even when we can't travel, our ideas still can, skipping over continents and time zones, bouncing back off like minds, reverberating. I scratched the surface to discover that same little boy escaping. Still chasing the beautiful patterns.

Those patterns are here, wrapped up in the pages of a book I didn't expect to write, along with some of the magic I stumbled across as a child. I'd like to think I've captured the essence of what I've learnt along the way, not just the skills and ideas, but the spirit and the imagination.

So, for all of those amazing adults who took the time to stoke the fire of my creativity as a child, I wanted to pay you back by paying it forward...

Why? Will this book create future artists? Well, you can't 'make' someone become an artist, but what you can do is show them how to have fun creatively, and ultimately that is how all art begins, with enjoyment.



How To Use THIS BOOK



Resources for the Resourceful

First and foremost, I've tried to make sure that the artwork in this book is achievable, affordable, effective, enjoyable, and useful.

To use a cookery analogy, these are my 'recipes'. They aren't set in stone, and you can simplify, modify, and adapt them as you wish. I've used my favourite basic ingredients, but you could add your own, or leave some out. You might want to make your recipe more refined and complex, or you might want to rustle up something much quicker and less fussy. All of this is up to you.

The methods I use are often interchangeable and some will work equally well for the same task, so in terms of techniques it often comes down to decision-making. What is the quickest method, the strongest technique? What will this particular group of children find the easiest or most enjoyable?

The Projects

This book is divided into five themed chapters – Faces & Figures, Birds & Beasts, The Natural World, The Made World and Imaginary – each comprising ten ideas.

Each project is divided into three pages.

- The first page is simply the 'What' and the 'Why': a list of the materials and tools required and an introduction to the main concept and why I think it's useful.
- The second is the 'How', providing detailed, step-by-step instructions of the process along with hints and tricks to help make it easier and more successful.
- The third is the 'Where' and the 'When', offering advice on how to take the project further and adapt the method for different age groups or abilities, with suggestions of possible themes or topics that might readily link to each idea.

The Shortcuts

In amongst the project instructions there are 25 specific techniques that I use to save time or simplify the process; these are skills that are transferable to many different ideas. Hopefully these shortcuts will prove valuable and will eventually become second nature. The shortcuts are also listed at the end of the book for easy reference.

Art terms explained in the glossary are italicised throughout.

TOOLS AND MATERIALS



Before we start making anything, let's have a look at the materials and tools I've used in the process of creating this book. I don't use any fancy, expensive tools and certainly no power tools. Many of the materials I use are free, for example recycled packaging, scrap paper, and different types of cardboard. The rest are tools that you probably already have or, if not, they will be cheap and easy to get hold of.

For cutting I use a decent pair of scissors, strong enough to cut through cardboard, or occasionally I use a small craft knife. I sometimes use a hole-punch, mainly so I can use the cardboard circles it punches out, but sometimes just to make holes!

The pencils I use are usually on the softer side as I use them primarily to outline 3D work and harder ones will often just rip through the material.

I recommend using decent quality, branded masking tape as it's stronger and stickier than the cheaper options. If you buy it in bulk from a supplier, the costs are always more reasonable.

For glue I always stick with PVA (school) glue. However, I use it in three different strengths for specific tasks. I use regular PVA glue mixed 'half and half' with water for papier mâché and to *glaze* over work to make it more hardwearing, or 'neat' for gluing stronger elements together. If the artwork requires a little extra strength, I sometimes use wood glue, a stronger version of PVA.

For painting I just use a variety of regular paint brushes, sometimes a slightly larger one (like a small house-painting brush). Occasionally I rip up old washing-up sponges to paint and highlight with.

The paints I use are ordinary school watercolour paints which come ready-mixed. I also use water-based metallic paints to add a bit of shine and I occasionally use acrylic paints, often just a little black or white, to increase the contrast in a piece of work. Acrylic paint offers blacker blacks and whiter whites than watercolour or water-based paints.



You can obviously buy cardboard in all types of sizes, thicknesses, weights, colours, and textures, but most of what I use is recycled, collected from deliveries and food packaging, or sometimes salvaged from recycling centres. I use what I call 'box card' for the thicker bases and for stronger construction, then I use thinner 'cereal box' card for building things that need to be folded or shaped.



The card used in this book has no print on it, but you can just as easily use the inside of food packaging boxes. I also use corrugated card (used for packaging). Often I rip the 'skin' from box card and use both parts, the corrugated layer inside for texture and the skin itself to glue onto models to disguise the masking tape used in their construction. (See more on page 12.)

I also use a few different types of paper for papier mâché and *collage*. These are usually just recycled packaging paper, florists' tissue paper, basically anything cheap and thin! I sometimes rip up old magazines and occasionally I use newspaper, but if I do I try to cover over the print with one layer of tissue, to improve the finish. I save all sorts of packaging paper from deliveries, including the types used to pad out boxes to stop items getting damaged. If you do this kind of work, you become a magpie, saving all sorts of scrap materials and hoarding them away.

There are a couple of other cheap materials that I always have to hand because they have specific uses and benefits. Tin foil (cheap kitchen foil) is a fantastic modelling material. Strong, malleable, and lightweight, it can be cut, rolled, and twisted into different shapes that can easily be attached and cut back into. I also use paper straws (sometimes called 'Artstraws') which are rigid and strong enough to create sharp edges. These often improve the structure of a piece of work and are great to chop up for decoration too. For smaller, more intricate work, I occasionally use matchsticks, wooden skewers, cocktail sticks, and even dry spaghetti for finer details and outlines.

Tools and Materials

CUTTING
PENCILS
TAPE
GLUE

GLUE

BRUSHES

PAINTS

CARDBOARD

PAPER

OTHER MATERIALS

CARDBOARD CONSTRUCTION → THE FOUR KEY BUILDING METHODS

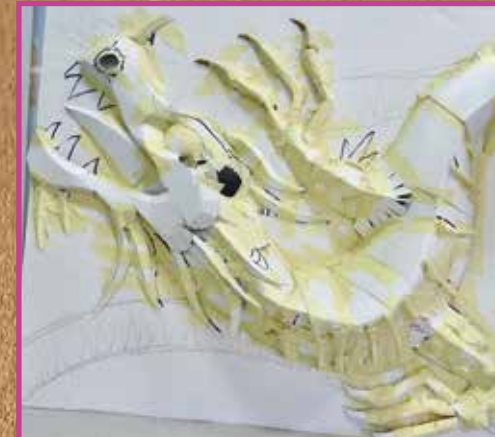
All of the projects contained within this book use one or more of four 'key building methods' to transform flat cardboard into three-dimensional shapes.

To make it easier to remember, I often refer to these methods as the 4 'S's': **Shapes**, **Slits**, **Scoring**, and **Strips**. My instructions will recommend which of these methods will produce the quickest, strongest, or most effective results; sometimes the process might involve a combination of more than one. As you become more confident and familiar with these techniques, you'll get better at deciding which method is most suitable for a particular task.



Slits

One of the simplest ways to make a flat piece of cardboard become three-dimensional is to slit it and then pull the pieces together so that they overlap. This can be done with all kinds of shapes, and you can increase the number of slits to make this effect more pronounced. It's a very versatile method and you can control it easily by varying how far you overlap the pieces. Slits can also make some cardboard shapes become more flexible and easier to push into position. For example, I often use 'zip cutting', which is what I call the technique of cutting slits along either side of a fold. This makes a shape flexible in all directions. (See Shortcut 7 on page 52.)



Strips

Strips of thin cardboard, even roughly cut, can be used to quickly build up a framework which can be fashioned into almost any kind of 3D form. It's also highly adaptable: the strips can be re-cut, repositioned, or even joined onto other shapes to make more complex structures. I've used this technique to build a simple sphere, but I've also used it to construct entire animals. For larger structures it can be worthwhile inserting cardboard supports to help to hold the framework together and to keep the artwork stable.



Shapes

Key 3D shapes like boxes, cones, and cylinders often form the basis for my 3D projects, providing structure and stability.



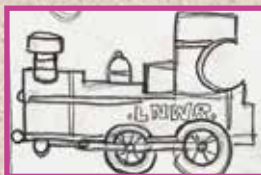
Boxes can be made as 'nets' using the 'cross' shape illustrated above or they can be made by using a rectangle with the corners cut off, like my simplified version in the photo. Cylinders are neater and stronger if the cardboard is 'rolled' around an existing tube first. Cones can be constructed by rolling up pieces of card cut into 'pizza slice' shapes; the wider the pizza slice shape, the wider the resulting cone will be.



Scoring

Scoring cardboard with your scissors produces a clean, sharp fold. It's a great way of making the cardboard stronger and defining the edges of particular shapes at the same time. It can create simple structural folds, but it can also be used in more imaginative ways: scoring doesn't need to be in straight lines, and curves can soften the hard edges that sometimes occur when using cardboard as the main medium. You can also score cardboard several times in order to 'break' the surface and make it more flexible and malleable.





Planning and Resourcing

Planning a piece of 3D artwork relies on two sources: the real world and your own imagination (and often a combination of the two). The more realistic the subject matter, the more reference material you might require for the children to work from. The more imaginative it is, the more you can rely on their own ideas, memories, or imagination. So, for example, if I was creating 'tiger masks', I might gather together lots of images to help: maybe photos from various angles, possibly images from a variety of cultures, or artwork created using a range of materials or in different styles. On the other hand, if I was making 'dragons', aside from possibly using images of 'serpents' or 'lizards', I would rely more heavily on the children's own imagination or intuition. Or I might also use imaginative illustrations created by other artists as an additional stimulus.



Pure Making

When devising an idea, I try to be aware of how I use the materials involved and what might potentially be wasted. If there is a way of using up all of the materials without throwing anything away, then I make that my goal. This is what I call 'pure making'. Many of the ideas in this book follow this blueprint. If there is anything left over, I store it away ready to use as *collage* materials for future creations.



Dry Building

If I'm creating low *relief*, collage, or textural work then I sometimes use glue from the outset, but most of the time, at least during the initial construction stages, I just use masking tape. 'Dry building' the artwork means it's easier to adapt or alter and creates less mess. You can always do this in stages too, for example you could 'dry build' a simple mask, add a layer of papier mâché over the surface and, once dry, then build more elements on top to increase the complexity. This process can even be repeated. If something does need strengthening early on, then you can either use thin wire to support it, or whatever is at hand to prop it up while you work on it, such as a cardboard tube or even a pencil fixed temporarily onto the model.

Jigsaw Making

If I want to build a single sculpture with a larger group of children, I usually get them to work together to make different elements of the same piece. For example, for an animal, groups could create parts of its body separately before joining them back together. This can mean you have to sketch out the basic size of the elements first, but it then allows you to spread out and use a larger space, with all of the children able to reach and join in at the same time. I call this 'jigsaw making'. You can also bring the pieces back together at any stage in the process to explore the next steps and to discuss any last-minute ideas and suggestions the children may have.





Secret Sticking

Masking tape itself can be enough to hold a piece of work together so it can be painted. However, I often add a layer of tissue papier mâché, either over the whole piece or at least covering the weaker parts. Tissue paper is strong enough to reinforce a sculpture but it's also fine enough to show up any details or textures on the surface. If the work is attached to a base or backdrop, I also use the 'skin' of the cardboard as a material in its own right. Thicker 'box' card is made up of layers and if you rip off the top layer, or 'skin', then you can paste this over any construction tape you need to hide. As it has the same colour and texture it provides the perfect cardboard camouflage.



Undercoating and Overpainting

When decorating the piece, I recommend adding basic colours onto the artwork first before focusing in on the detail. These colours can either be introduced by using coloured tissue paper during the strengthening stage, or by painting a simple *wash* of colours over the whole piece. It's important to try to retain the energy in the work by keeping the initial painting stage experimental and expressive, something that young children will naturally do. I keep any details to a minimum at this stage and try to work tonally when I can, sometimes *overpainting* with washes and layers of paint or using highlights and shadows to accentuate the 3D effect. Finer details can then be added without losing the energy or spontaneity of the artwork.



WHAT TO DO NEXT →

The aim of these projects is to start something off, to initiate ideas, but ones that you can easily adapt and extend to suit all manner of creative outcomes and themes.

I've tried to give you enough structure and advice to make things work, while at the same time allowing you the freedom to play with the techniques and materials and the flexibility to adapt them for different outcomes.

Hopefully these will not just be standalone projects but will unlock each construction method and become the catalyst for countless creative ideas.



Let's take a theme like 'The Tudors'. How might these projects be used to enhance the children's learning around this topic?



Firstly, you could look at faces, for example creating portraits based on paintings of the court by the famous painter Hans Holbein. You could recreate 3D versions of these using the 'face' projects in Part 1, maybe the 'framed portrait' idea in Project 7. You could also look at costume and use some of those ideas to create 'one-fold figures' (Project 10) or 'cone figures' (Project 42) using the original costumes as reference. You could build crowns using Project 34, or a suit of armour using the 'robot' technique in Project 47. Weapons could also be a good source of inspiration, and you could base these on the ideas in Project 35. You might focus on buildings, using Project 33 to create a Tudor town house or mansion, or maybe you could explore Tudor ships, using Project 36 to create pirate ships or famous galleons like the Mary Rose.

If you're working with younger children, sometimes just the first few stages of the instructions will provide enough of a stimulus: you can pare down the process and simplify the results.

For older or more capable students you can take more time. You can include more detail, modify the techniques, improvise, and add more of their own ideas...

...and for you personally, you can take the 'bones' of these projects and put your own spin on them, make connections, weave in your own skills and strengths, challenge yourself and dream up new concepts. As you grow in confidence, one project will provide the catalyst for another, you will begin to spot the patterns, and the possibilities will take on a life of their own.

Imagine... Explore... Innovate...



PART ONE

Faces & Figures

'Throughout human history, virtually every culture has made masks or painted their faces. We share a common need to walk in someone else's shoes and see the world through their eyes.'

