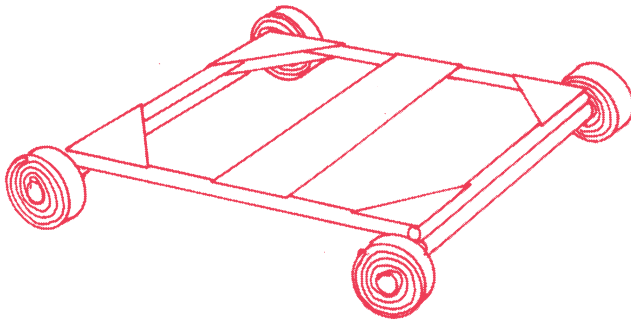
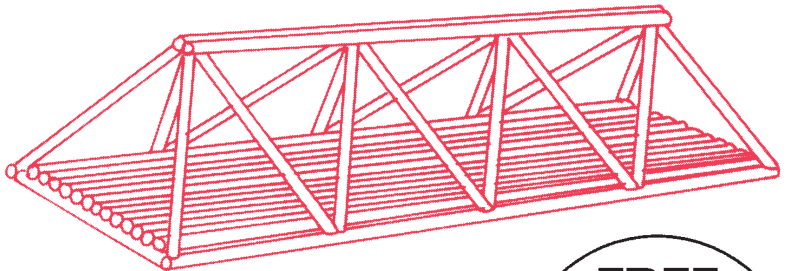


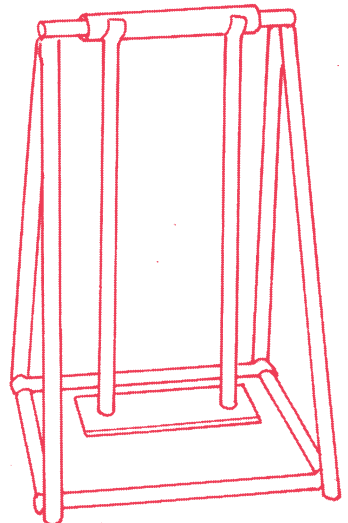
Artstraws

AN IDEAL D&T MATERIAL



This introductory booklet shows teachers the many ways in which Artstraws can be used to develop D & T skills and deliver the National Curriculum for Design and Technology at KS1, KS2 & KS3. By using a 'weak' material such as paper straws, the pupil can learn how to investigate the properties of material and be able to change its characteristics.

The booklet starts with simple focused practical tasks designed to investigate the material and progresses through more complex focused practical tasks to design and make assignments exploring movement, vehicles and boat building.



BASIC JOINING TECHNIQUES

There are many ways to join Artstraws, most of which are detailed below.

This could be your first problem-solving exercise

– How to join 2 pieces of Artstraw

a. using just straws

b. using other materials such as glue, pipecleaners, paperclips etc.

Straight Joining

1. The end of one straw is creased and inserted into the other straw. Glue if necessary.



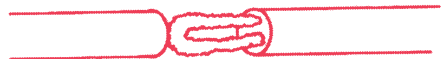
2. Ends flattened and glued.



3. Sleeve made from straw. Glue if necessary.



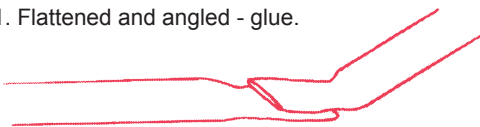
4. Pipecleaner insert.



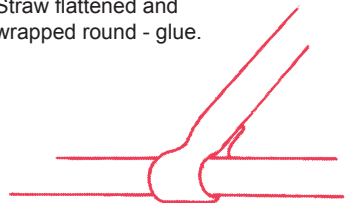
NOTE: It is possible to repair a buckled member of a structure by using method 3.

Angled Joins

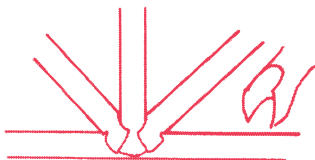
1. Flattened and angled - glue.



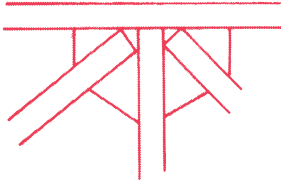
2. Straw flattened and wrapped round - glue.



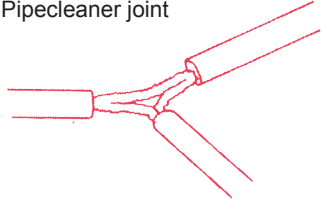
3. Straw split and fitted around - glue.



4. Paper or card joint - glue
(see also section on Constructor Corners).



5. Pipecleaner joint



6. Threaded and tied - use a tapestry needle



Moving Joints

1. Pivot joint using pin, wire or paper fastener.



2. A thin Artstraw can slide or rotate inside a thick straw



3. A thick Artstraw can slide or rotate around a thin straw



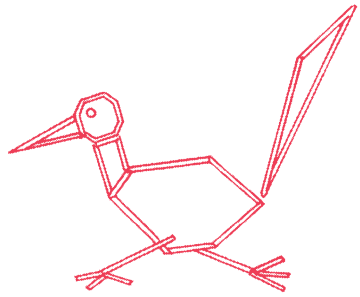
4. A combination of techniques can be used to enable movement at right angles.



SIMPLE FOCUSED PRACTICAL TASKS

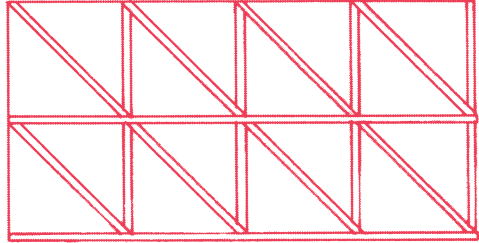
1. Plane Shapes

To the child's level in Maths - triangles, squares, rectangles, kites, trapeziums, pentagons, etc. Make geo pictures from shapes.



2. Patterns

- a. free choice
- b. plane shapes
- c. tiling and tessellations
- d. non-tessellating plane shapes



3. Symmetry

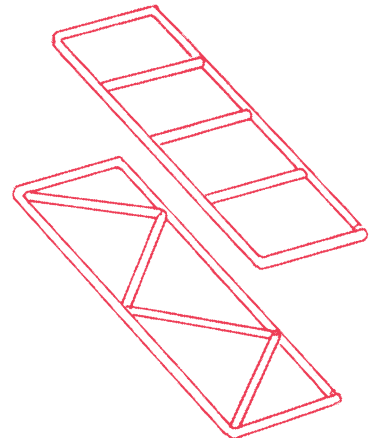
- a. reflected picture
- b. about a vertical axis
- c. about a vertical and horizontal axis



4. Area and Perimeter

Flatten an Artstraw and join it end to end. It can be used to make a boundary to a shape.

- a. Make a series of different rectangles using just one Artstraw for each rectangle. Mount them on cm squared card. What do you notice about their areas?
- b. Using one Artstraw, make the largest round shape you can. Mount it on the same cm squared card. Measure its area.
- c. Again using one Artstraw, make a shape which will contain the least area.
- d. Which of all these shapes has the greatest area?

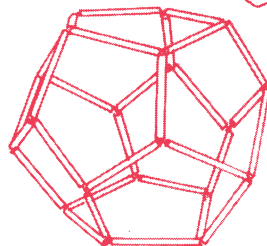


5. Frameworks

Make a long rectangle from one Artstraw (approx 15 x 5cm). Build in a series of cross pieces, diagonal etc. to make up a framework. You may see patterns you would like to try by studying girder bridges, electricity pylons, etc. Test its strength across a 10 cm gap by applying a load at mid span.

6. 3 Dimensional Shapes

Using equal edge lengths, try making as many different 3D shapes as you can.



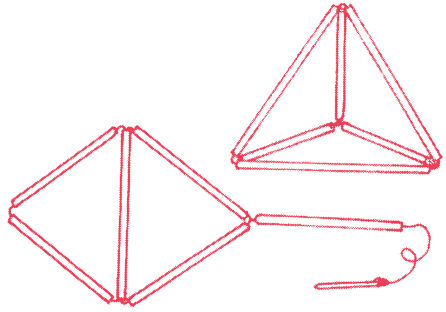
MORE COMPLEX FOCUSED PRACTICAL TASKS

It is suggested that teacher and pupils carry out the first task together. For example, the strength or stability tests.

STRENGTH TEST

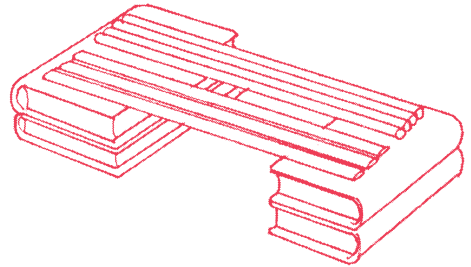
Devise a test to see which is the strongest in supporting a load (weight) at mid span across a 15cm gap.

- Flattened Artstraws
- Tubular Artstraws



STABILITY TEST

Design the tallest structure that you can, that will support its own weight and be stable on a flat surface.



BRIDGES

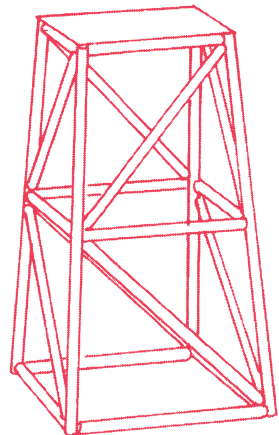
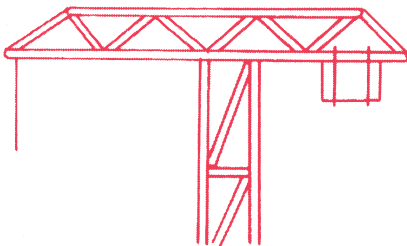
Materials: Artstraws, glue, sellotape, paper clips

Bearing in mind what you have learnt from the strength tests, use 6 Artstraws to design and build a simple bridge that will support a 50 gram car at mid span.

TOWERS

- Using Unifix (or similar blocks), build a tower as high as you can. Compare its height and base area. Now build a higher tower with 5 Artstraws. Use any fixing material you like.
- Using 5 Artstraws, based on the information learnt in *a*, build a new tower to support a marble on top.
- Following on from *b*, build a tower with an arm out horizontally from the top of the tower which is at least 5 cm long and will support a marble at the end. Did the tower topple over? The illustration of the crane shows one way of solving this problem.

This can lead to discussions and further tasks on balance.



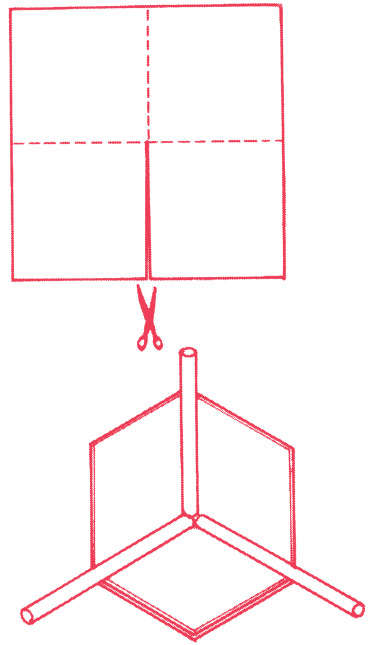
MAKING 3 DIMENSIONAL SHAPES

A framework can be made using only scissors, glue, paper and Artstraws.

Assembly Instructions

- Using paper or card, cut out a square.
- Fold inwards along the dotted lines.
- Cut, to the centre, along one fold line.
- Overlap the panels on either side of the cut and glue to make a finished 90° corner piece.
- Make sufficient corners.
- Cut lengths of Artstraws as required for the edges.
- Using the corner pieces and Artstraws, make up one face of the structure.
Always leave 'material width' space in the corners when fixing edges for final adjustment of structure shape.
- Repeat 'g' until all the corners have been used.
- Fix the faces together to make the final shape.

Make a cube, measure and cut a diagonal for each face. Then glue the diagonals in place so that they meet at the same corners on adjacent faces. What is the new 3D shape inside the cube?

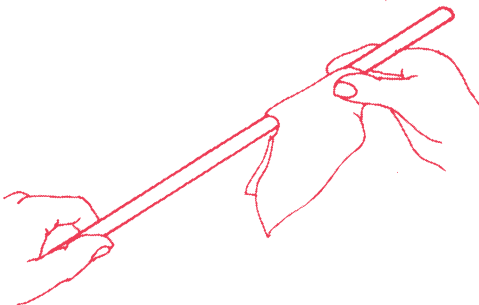


CHANGING THE WORKING CHARACTERISTICS OF MATERIALS



BUNDLES

It is often necessary to use a number of Artstraws alongside each other. Apart from gluing, we can use 'banding' (elastic bands, thread, paper wrapped round and glued, flattened straws wrapped round and glued).



REINFORCING STRAWS

If an Artstraw is needed as an axle or spindle, it is often desirable to strengthen it. This is best done by inserting a length of creased straw. A thick Artstraw can be strengthened by simply inserting a thin straw.

Filling Artstraws with fine sand will add weight and stability where required, e.g. suspension bridge, crane, roundabout base, etc.



COLOURING & FINISHING

(Red, Green, Yellow & Blue Artstraws are now available)

It is best to colour straws before use except for large models which can be painted or sprayed afterwards.

Use large felt pens, paints or food colouring. To apply paints or colouring, dip a piece of damp J cloth into the paint, wrap round straw and slide along.

Leave straws to dry before using.

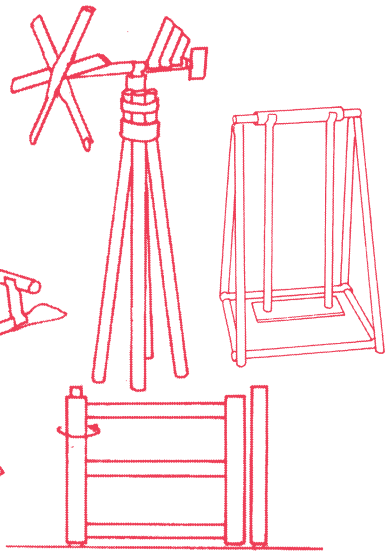
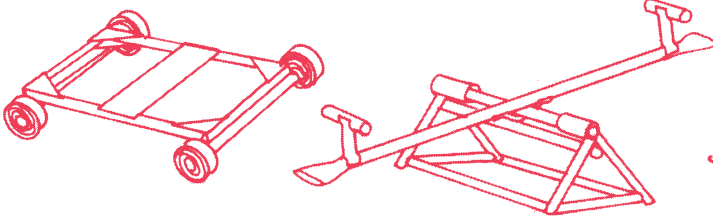
A special finish may be used to strengthen or waterproof a model. However, this is an area best left to separate investigations or problem solving.

DESIGN & MAKE ASSIGNMENTS: JOINTS THAT ALLOW MOVEMENT

The two sizes of Artstraws can be made to slide or rotate in conjunction with each other.

Here are some illustrations of models which have a moving element, such as:

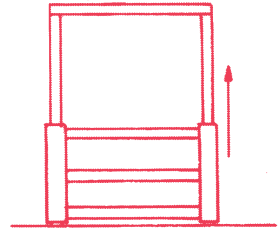
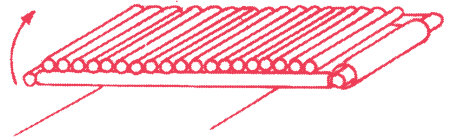
– the buggy, wind vane, see-saw and swing.



1. Design and make a model of a swing gate, drawbridge or sliding door.
2. Design and make your own opening and closing or raising and lowering device.
3. Develop your idea so that it becomes a 'self closing mechanism'.

As in –

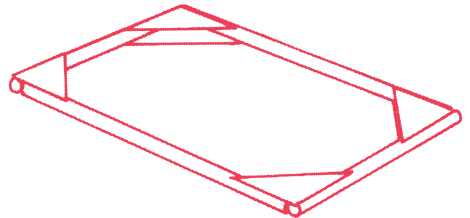
- a. a farmer's gate to keep sheep in, but allow walkers through
 - b. a drawbridge, with fast lowering capacity
 - c. a vertically sliding sluice gate
- clues – gravity, weight, springs, etc.



VEHICLES WITH WHEELS AND AXLES

Strong Artstraw frames can be built by using triangles of card.

- a. Make a buggy as shown on the cover. You may need to reinforce the axle.
- b. Make a box shape using triangles of card and Artstraws. Cover the outside so it becomes the body of a vehicle. You can make it the right size to fit on the buggy.



BUILDINGS

- a. Make a frame using triangles of card and Artstraws.
- b. Cover the outside of the card and add details.

BOAT BUILDING using the 'hoop technique'.

The 'hoop technique' is a very simple method of using Artstraws to make all kinds of boats which can be used in projects on Normans, Vikings, canals, fishing etc. The basic construction work can then be extended into a problem-solving exercise if required.

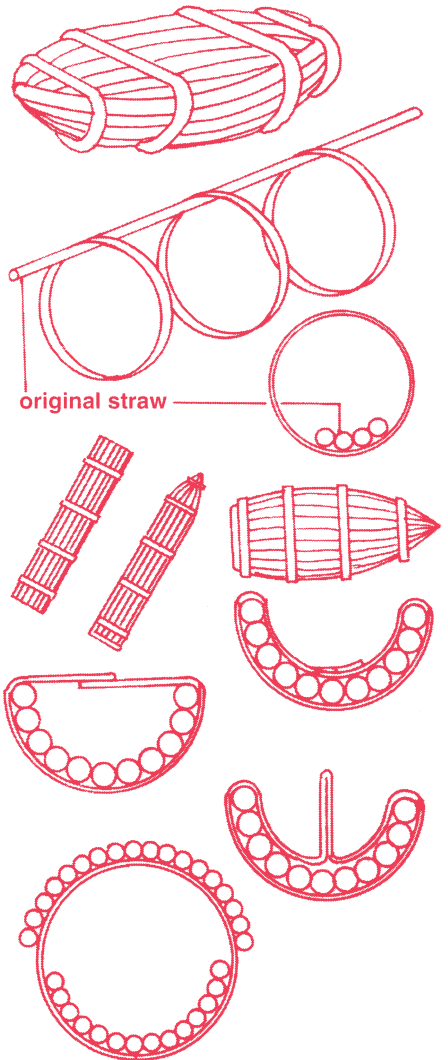
The easiest format is called 'The Closed Hull', suitable for long, narrow craft:

1. Flatten at least 3 thin Artstraws; cut and glue to make several hoops of the same diameter (5-6cm); lay one Artstraw through the equi-spaced hoops and glue into position; allow the glue to set with the Artstraw supported at each end.
2. By gluing, start to build up a series of straws on both sides of the original straw until you have achieved the hull shape you want.
3. Artstraws are flexible, so you can pinch them to make a pointed bow, bend them for a square stern, overlap them, or confine the straw ends in small hoops at the bow or stern.
4. You now have a variety of ways to use the hoops:
 - a. for hull strength you can cut the hoop and glue into the hull shape.
 - b. to support a deck, cut the hoop, trim as required and glue the cut ends across the top of the hull.
 - c. for a mast support, fold in a hoop, uncut, so that the folded piece extends vertically - this will fit inside a thick Artstraw.
 - d. for roofing supports leave two adjacent hoops free to fix extra straw lengths on top to provide a cabin roof.

Any combination of the above will add to the individuality of the vessel so that decking, masts, booms, etc., can be built up.

EXTENSION ACTIVITIES

- a. How can you make your craft waterproof?
- b. Test and improve its stability.
- c. How could it be simply propelled?
- d. How could it be steered?



Artstraws

easy to use
fun to do

Equipment:

Scissors, PVA glue, felt pens, paints, thick paper or card, ruler, elastic bands

COLOURING

It is best to colour straws before use except for large models like log cabins where they can be painted or sprayed afterwards.

Use: large felt pens, paints or food colouring.
To apply paints or colouring, dip a piece of damp J cloth into the paint, wrap round straw and slide along.

LEAVE STRAWS TO DRY BEFORE USING.

Aerosol paints

Quick and easy. Give a good overall colour and help strengthen models. Gold and silver are effective for Christmas models.

Varnish

Improves and strengthens models.
Use either brush or spray.



STICKING

White paper glue (PVA) is the best as it is not visible when dry.

When fast adhesion is needed, use an adhesive like UHU.

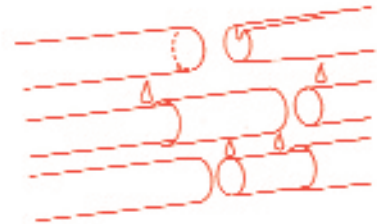
NOTE: When applying glue, straws will soften but become firm when left to dry.

JOINING

Glue is not the only way to join straws together. Joining straws of the same diameter (use in weaving)

1. Crease and pinch together one end of a straw. Gently push and twist into the other straw for 2 or 3 cm.
2. Use a piece of jumbo straw (about 4 cms long) to join two standard straws as in diagram.

Use a piece of standard straw to join jumbo straws.



For angled joints

Slit open the end of the straw and glue the two flaps around the other straw.

When joining several straws

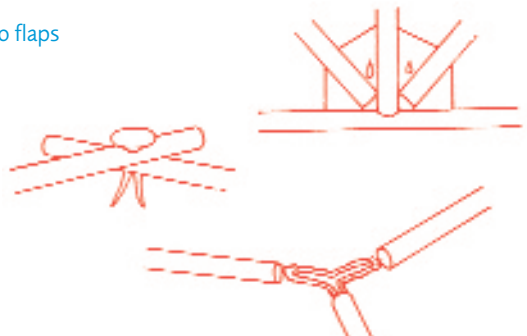
Stick cardboard or paper fillets over the ends of all the straws.

Pivot joints

Use either a pin or a paper fastener.

Pipe cleaner joints

Pipe cleaners are also very useful for making joints.



PICTURES AND CARDS

Here are some hints for the cards shown on the pack. When you have tried these, see what other pictures you can make.

Hedgehog Card

Draw a hedgehog shape or cut out of coloured card. Cut straws as shown to make spines. Starting with his tail, stick bits of thin straws onto the hedgehog laying them flat, partly on top of one another.

Christmas Card

Draw a Christmas tree shape and cut it out. Stick straws of approximate length onto the shape. Leave to dry. Turn tree over and trim off excess straws. Add different coloured straws for candles, presents, etc.

Train Card

With a pencil, lightly draw the outline of the train. Cut the straws to length and stick them in place.

Wheels

Flatten a fat straw and wind round a pencil. Stick the end in place.

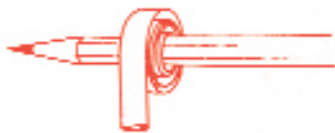
Coal

Use short pieces of straw

The 'Tower Bridge' card was made in this way.

Other Ideas

Interesting collages can be made by combining other materials such as wool, netting, spaghetti, etc., with both sizes of Artstraws.



THREADING

Jewellery Bits and pieces of Artstraw can be used to make bracelets and necklaces.

Using a darning needle, thread wool through various lengths and colours of Artstraws. It is best to decide a pattern before threading.

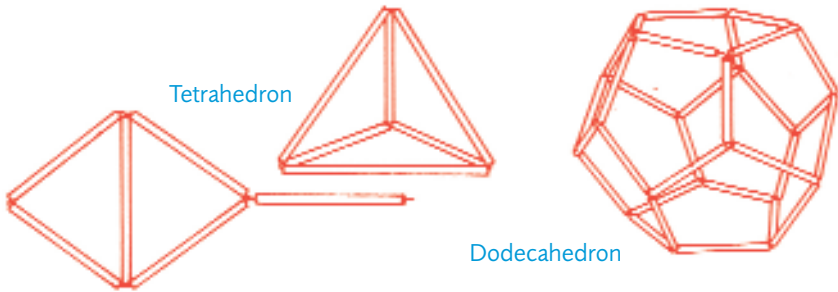
A three straw plait (using different coloured straws) will make a headband or a wrist strap for a pretend watch (see plaiting).

Velcro or double-sided sticky pads make ideal fasteners.



Geometric Shapes

These can be formed by threading together measured lengths of straws.

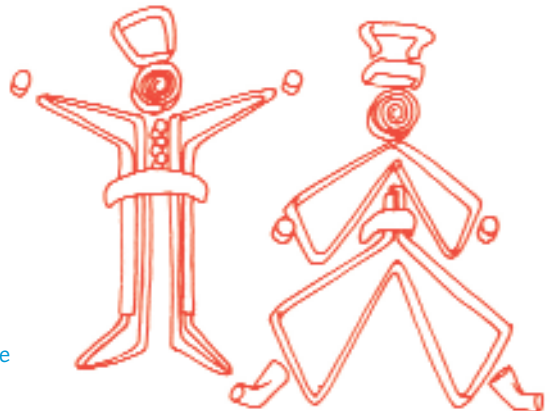
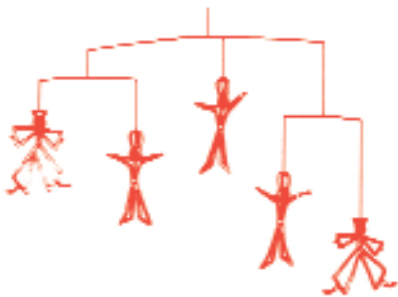
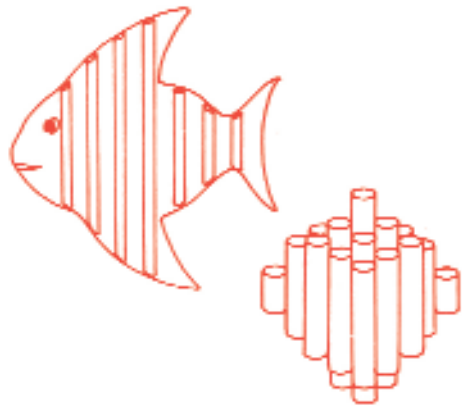


These shapes also make interesting mobiles. Send for our CDT leaflet for complete instructions on how to make the 5 regular solids using Artstraws and pipecleaners.

MOBILES

Various Artstraw shapes like those shown can easily be turned into mobiles by attaching them to a support with different lengths of thread.

A support bar can be made by inserting a slightly shorter piece of wire into a standard Artstraw and gluing each end closed so the wire does not fall out. The support bar can be a single length or in the shape of a cross or circle. After you have balanced the mobile, secure the threads to the support bar with a dab of glue.



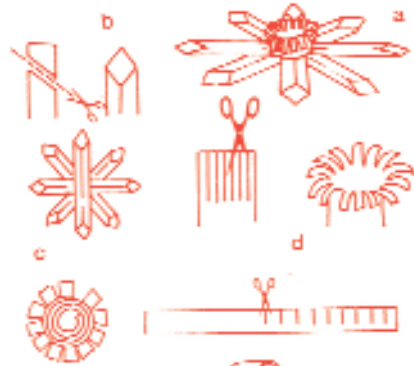
Instructions for a simple Christmas mobile are in our Christmas leaflet (send s.a.e.).

FLOWERS

Flowers created from Artstraws make pretty table decorations and can be used with normal flower arrangements or can be stuck onto Artstraw pictures.

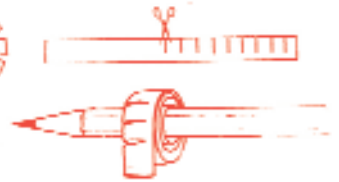
Flower 1

Gently flatten a jumbo Artstraw and cut into four equal lengths. Cut both ends of each length (see diagram b), half turn and flatten again. Now glue lengths on top of one another as in c. The centre of the flower can be made by making a number of cuts in a short length of Artstraw and spreading out the strips as in d.



Flower 2

Flatten a jumbo Artstraw and for 10 cm make cuts at one end as shown in diagram. Starting with the uncut end, roll the Artstraw around a pencil and glue the end in place. Gently fold out the cut pieces to form petals.



Flower 3

Flatten a jumbo Artstraw and cut off several pieces each 2 cm long. Cut as shown in diagram and open out to form the petals. Stick the petals down at the centre of the flower.



Flower 4

This flower is just a simple, short, four or five straw weave (see section on weaving).



Flower 5

To make the centre of the flower, flatten an Artstraw and roll it up, sticking the end to hold it in place. Cut off several pieces about 6 cm long from a flattened Artstraw, fold these in half and stick them round the centre.

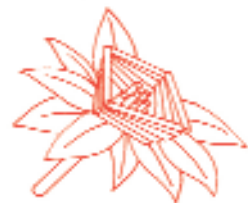


Stems

Stick an Artstraw to the back of the flower heads. If necessary, thread a length of florists' wire down the stem.

Leaves

Flatten a length of jumbo straw and make long, close, diagonal cuts along one side. Bend into shape. Leaves can also be made in the same way as the petals are made for Flower 3. Try cutting a leaf shape rather than a simple curve.



Daffodil

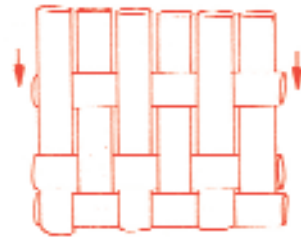
Write for our Easter leaflet (s.a.e.) for full instructions.

Flower Card

To make the woven basket - flatten a number of straws. Stick these straws vertically onto another flattened straw. The vertical straws should be close to one another and stuck alternatively on opposite sides of the horizontal straw. See diagram.

Leave to dry.

Weave flattened straws in and out of the vertical straws. It is best if the last straw to be woven is glued in place. Cut the weave into the shape you want for your basket. Finish off by sticking straws round the edge of the basket.



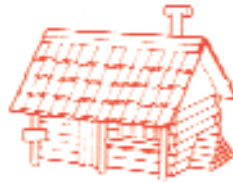
THREE DIMENSIONAL MODELS

(Buildings, vehicles, furniture and pretty containers).

Cover boxes, tubes, containers or pieces of card with straws to make your basic shape. Then decorate with different coloured straws and other materials.

Log Cabin

Stick straws onto a box to make the cabin walls. There is no need to cut straws to the exact length as you will find it easier to trim the straws after they have been stuck on and left to dry. In the same way, stick straws onto a large piece of folded card for the roof (a tiled roof can be made by sticking on short pieces of flattened straw). Stick the roof onto the walls and fill in the triangular gaps under the roof with card. Stick 2 Artstraws along the roof ridge. Paint the cabin and when dry stick on different coloured straws to create windows, door, logs, chimney, etc.

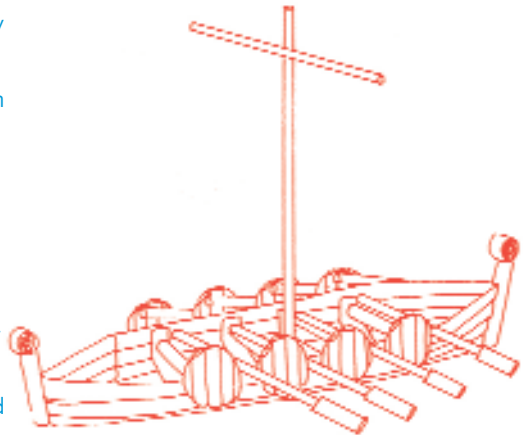


Rocket

Cover two tubes of different diameters with unflattened Artstraws. The smaller tube needs to fit firmly inside the larger tube (one way to do this is to stick a few shorter lengths of straw around the end which is being pushed into the larger tube).

Make the nose cone and fins from card covered with Artstraws and add your markings by using different coloured straws (see picture of rocket on pack).

For full details of how to make the Viking Ship send s.a.e.



Furniture

Tables and chairs can be made by sticking straws together or onto a piece of card. Angled joints (see Joining) are the best way of fixing legs.



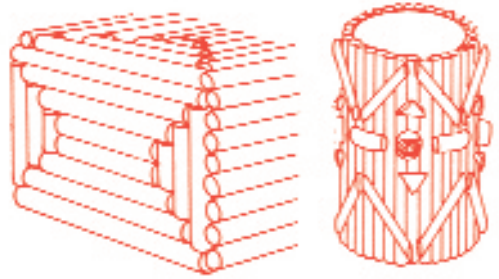
Containers

Stick coloured Artstraws onto boxes to make pretty containers (see jewellery box on front of pack).

Make a pattern with the straws when gluing them on and then decorate with an Artstraw flower.

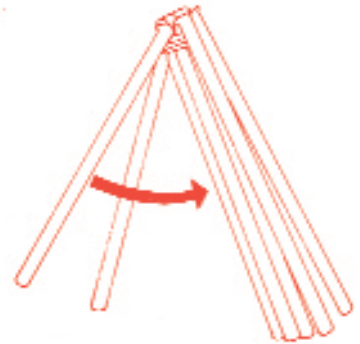
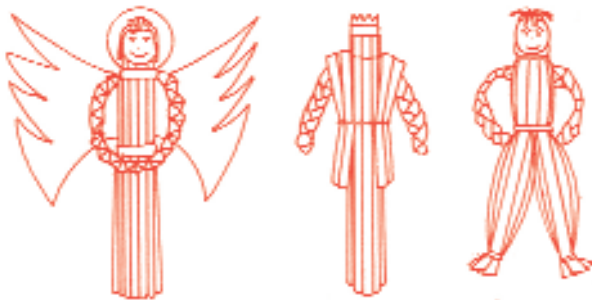
Jars or cardboard tubes can be covered to make pretty pen pots.

Straws can be stuck directly onto boxes or jars or may be plaited first and then wound round (see section on plaiting).



FIGURES

Bundles of Artstraws can be made into simple figures and different coloured paper or material added to decorate them. Arms can be made from a length of plaited or folded straws, wings from paper or straws can then be added to make angels or fairies.



To form basic shape

Tie an elastic band half way along a bundle of six jumbo straws. Holding the bundle upright, bend down each straw from the top half of the bundle so that you have twelve straws half the length.

Place another elastic band 3 cm from the top to make the head and neck. Make the face and stick on.

If you wish to add arms or wings, lift one straw back up and insert arms, folding straw back down to hold in place. Use an elastic band to form waist.

Hair

If you wish your figure to have hair, use 3 or 4 more straws in the bundle but do not fold these down. Cut these straws short and make cuts along these short pieces curling them with the back of a pair of scissors or knife.



PLAITING

Artstraws can be braided and plaited in exactly the same way as hair.

Plaiting is easy. Three different coloured straws plaited together will make necklaces, bracelets and hairbands or even little animals like Martha Mouse (detailed instructions below). Pieces of plaiting wound round a yoghurt carton make an attractive container.

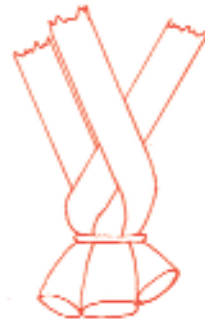


1. Join three standard straws together with an elastic band. Do not flatten. Plait in the usual way, i.e. fold the left straw over the centre straw, then the right straw over this new centre straw.
2. Continue alternatively crossing left and right straws over the centre straw until you have made the length you need.

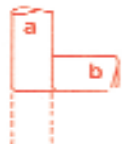
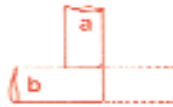
FOR FULL DETAILS OF 2 TO 6 STRAW BRAIDING AND PLAITING SEND S.A.E. AND 3 FIRST CLASS POSTAGE STAMPS.

Martha Mouse

1. Plait 3 straws until you have a length about 50 cm long. You will need to join straws (see Joining).
2. Eye: flatten a jumbo straw, wind round a pencil and glue the end in place.
3. Body: wind the plait into a flat spiral (like a table mat) and squeeze it to form a point for the nose. Make a hole for the eye, push it into place and glue.
4. Ears: thread a 20 cm length of flattened jumbo straw through the plaiting. Loop the ends back under the plait and glue in place.
5. Whiskers: flatten a 6 cm jumbo straw and thread through the plaiting. Glue into place. Make several cuts along each end of the straw and curl them.
6. Tail: thread a flattened jumbo straw through the back of the mouse and glue into position half way along the straw. Fold the straw so that the two halves are at right angles and plait in a concertina fashion.



Fold b across to the left of a
Fold a down over b
Fold b back to the right of a
Fold a back up over b
Then repeat



WEAVING

Realistic models can be created from tubes of "woven" Artstraws, sometimes just from a single tube but often from several tubes joined together with a few pieces added for eyes, ears, etc.

Before starting, read through the weaving instructions. Weaving may seem complicated at first, but with practice you will find it quite easy.

We do recommend you follow the progression of models, gradually building up your weaving skills. Once you have learnt straight weaving and joining and finishing, you can make Katy Caterpillar, progressing to Cyril Snake, Sammy Snail and finally Donald the Dinosaur.

When you have finished a piece of weaving, even your first or second attempt, try to turn it into something, for example little bits of Artstraws added for eyes, ears, whiskers and a tail will turn almost any woven piece into a cat.

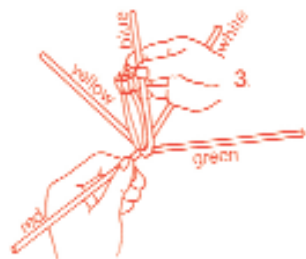
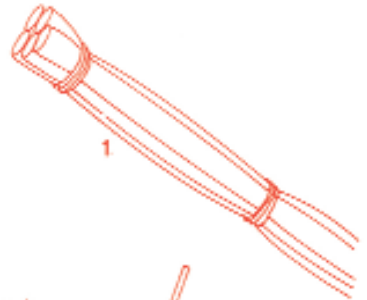
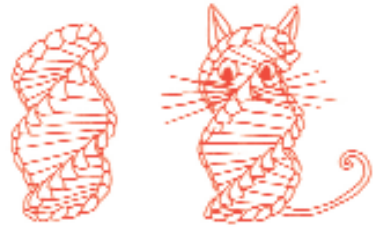
WEAVING ARTSTRAWS

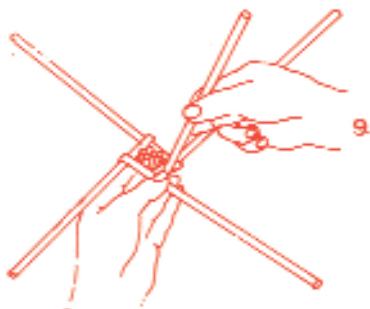
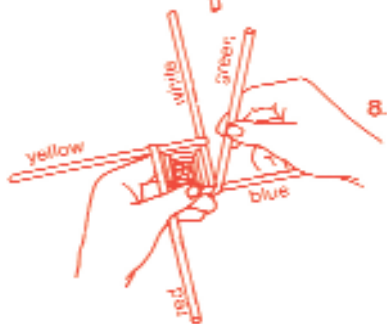
These instructions have been written for "right handed weaving". If you prefer to weave left handed, see "Hints" overleaf.

The easiest way to learn how to weave is to start by making a straight tube. The instructions will be simpler to follow if you use 5 different coloured standard Artstraws, just until you have mastered the technique.

1. Take the coloured Artstraws and using elastic bands tie them firmly together once at one end and again half way along. This is called a former (diagram 1).
2. Fan out the straws at the free end like the spokes of a wheel and hold them in your left hand so that the fastened end points upwards (diagram 2).
3. Start with the blue straw pointing towards you, fold the blue straw over green and white, keeping it close to the former (diagram 3).
4. Hold the blue straw in position with the thumb of the left hand and turn the work clockwise so that the white straw is now pointing towards you.
5. Reposition your left hand to hold the work more comfortably. Now fold white over blue and yellow (diagram 4).
6. Repeat this process as shown below but always turn the work clockwise and reposition your hands each time you fold over a straw.
7. Fold yellow over white and red.
8. Fold red over yellow and green.
9. Fold green over red and blue.
10. Fold blue over green and white.
11. Fold white over blue and yellow.

Continue to weave round the former in this way, always **PICKING UP THE LAST STRAW YOU WENT OVER AND PASSING IT OVER THE NEXT TWO.**





12. Add more Artstraws when necessary (see Joining) and continue weaving up round the former to make a long straight tube (the diagram 5).

To finish

To finish off a woven item, simply tuck the last straw under the one which it would otherwise have rested on (diagram 6). Pull it tightly into the corner and glue into position. Cut off the excess Artstraws. These have already been trapped in position but a spot of glue will ensure they stay in place.

To weave without a former

1. Take 5 Artstraws and fasten them firmly about 2 cm from one end.
2. Start weaving exactly as before, using the short ends as a small former. Once you weave up beyond the former your first attempt is likely to be very loose with no real shape. However, practice the next set of instructions and you will soon be able to make different shapes.

TO WEAVE A SHAPE

Increasing the width

Instead of taking the working straw over the next two straws, pass it over the first straw and lay it alongside the second, not over it. Now bend the second straw down, under and back over the top of the working straw, laying it alongside the next straw (see diagrams 7 and 8).

Continue like this until the tube has reached the required width. It is important to use the left hand to hold the working straw gently in position as you work the second straw with your right hand.

Reducing width

Take the working straw over the next two straws as if weaving a straight tube, but lay it slightly inside the second straw. Continue like this until the necessary reduction has been made. The further you lay the straw inside the second straw, the quicker your tube will reduce in width.

Keeping the same width

If you want to keep the same width, the working straw should be placed on top of the second straw.

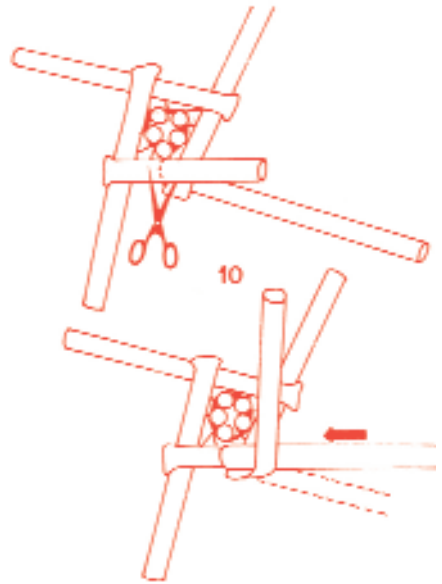
HINTS

Weaving

- Hold the straws firmly, but try not to squash them.
- Do not hold the straws halfway along, but close to the weave, as shown in diagram 8.
- Bend the straws as near to the corner as possible.
- Do not increase or decrease the width too quickly or the model will be very loose.
- Five straws are the easiest to weave, but anything from 4 straws upwards can be used. The more straws used, the rounder the finished article.
- Left hand weaving - left handed people usually find it easier if the working straw is on the left of the tube. They then weave in a clockwise direction turning the work anticlockwise. Looking at the diagrams through the back of the page held up to the light will give you a good idea!

Joining

- always continue weaving until only a short length of straw remains.
- do NOT join the new straw where the join will fall on the corner. Instead, cut back the end of the old straw so that the join lies between the two corners as shown in diagram 10.



Katy Caterpillar

(the basic straight weave).

Uses:

- 16 standard straws (approx.)
- 4 painted flattened straws.
- 1 piece of florists' wire.

Body:

Weave 5 straws round a 'former' until the tube is about 4cm long. Cut a piece of wire about 30cm long and insert into a straw which is slightly longer. Now insert this straw, covered wire into the tube-making sure it fits into one of the straws of the 'former'. Continue weaving the tube, joining straws where necessary until you reach the end of the wire. Finish off as shown in the instructions.

Eyes:

Cut one of the flattened straws in half and roll it loosely round a pencil. Remove the pencil and roll the straw up tightly, securing the end in place with glue. Glue the eyes into place.

Legs:

Cut the remaining flattened straws into 3cm lengths. Fold each length in half, glue the folded point and push into the weave of the body every 1cm. Bend caterpillar in middle.



Cyril Snake

(basic weave and weaving in and out).

Uses:

30 standard straws (approx.)

1 jumbo straw.

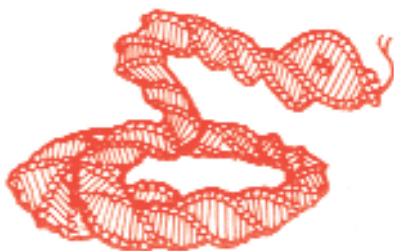
Weave a tube following the instructions for the caterpillar, but make it about 50cm long. A wire can be inserted as for caterpillar.

Head:

Quickly widen the tube to a diameter of 6cm and reduce the tube more slowly to a point. Finish off.

Tongue and Eyes:

Flatten and gently curl a jumbo straw with a 'V' cut out at one end to form the tongue. Push between 2 straws at the point of the head. Make small eyes as for caterpillar.



Sammy Snail

(basic weave, weaving in and out, flat weaving, joining tubes).

Uses:

Approx. 40 standard straws.

NOTE: Use 6 straw weave for each section.

Body: (approx. 18 straws)

Start at the head. Bring the weave out gradually to 6cm and then in again to 4cm. (The body should measure about 7cm long so far.) Continue weaving straight until the body is about 18cm long. Now gradually and evenly bring the tube in to a point; the body will now be about 23cm long. Finish off.

Shell: (approx. 12 straws)

Weave out quickly and evenly until the shell measures 10cm across. Use a very short (1 or 2cm) former and make the shell about 8cm high.



Hat: (approx. 6 straws)

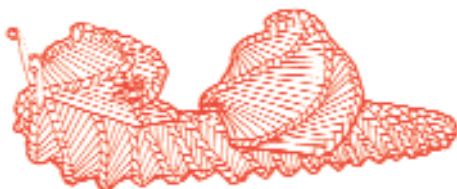
The flat top to the hat is best achieved by starting to weave without tying straws together, ie. without a former. Take 3 straws and place them in a star shape (see diagram). This gives 6 working ends. Hold the centre of the star firmly and using one of the ends of the lowest straw start to weave immediately as for 'increasing'. Try not to flatten the straws, but nevertheless 'make' the weave almost flat. Continue weaving like this until the top of the hat measures 4cm across. Now weave up normally without increasing or decreasing for about 2cm. To make the brim flat weave out for 1 cm. Finish off.

Antennae: (1 straw)

Cut a straw in half. Flatten each piece for half its length and roll up tightly, securing the end with glue. Push each antenna in place between the weave and glue.

Flower: (see instructions under 'flowers').

To complete: Glue hat and shell into position on body.



Donald the Dinosaur

(basic weave, weaving in and out, joining tubes).

Uses:

- 49 standard straws
- 2 jumbo straws coloured green

Head:

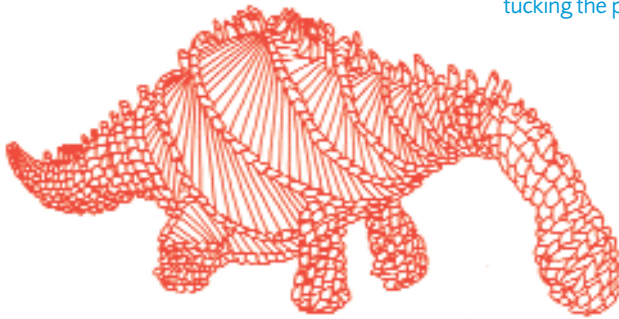
Secure 6 straws with a single elastic band and commence weaving (using a very short former) increasing the diameter to 3.5cm. Place a length of florists' wire, about 45cm long, inside a standard straw. Then insert the straw-covered wire into the short end of one of the six weaving straws inside the weave. This wire will form a core to the model but will take no part in the actual weaving. Neck: Now continue weaving, reducing the diameter to the narrowest possible width around the wire until the overall length measures 17cm.

Body:

To shape the body, start increasing the width gradually until it measures 10cm across. Maintain this width for 3 or 4 complete turns and then decrease again to give the gently tapering shape of a dinosaur's body. Continue weaving in as narrow as you can and then continue for a further 12cm to make the tail. Finish off by gluing the last working straw in place, ensuring that the wire is enclosed within the model. The final length should be approximately 50cm.

Legs:

To make the legs, weave six straws out to a diameter of 3.5cm. Continue at that width until the length of straw is used up (approx. 6cm long). Repeat to make 4 legs, then glue into position on the underside of the body. Bend the animal into the characteristic dinosaur shape. Using the green jumbo straws, cut spiked lengths approx. 2.5cm long and glue them along the spine of the animal, tucking the pieces into the weave.



Traditional Corn Dollies

The centuries old, countryside craft of corn dolly weaving is still popular all over the world. The idea of using paper straws to make models such as dinosaurs and daffodils came from this craft and the 'weaving' techniques we use are the same as those used to make the traditional corn dollies. To make a corn dolly, you can use Artstraws instead of real straw (see cornucopia and flower lady on pack).

Artstraws are cleaner, cheaper and easier to use and some people practise the various techniques with them before making their final corn dolly from real straw. Instruction books for making corn dollies are available from most public libraries.

Send s.a.e. for detailed instructions on how to make flower lady and cornucopia.



FURTHER INFORMATION

Packs available:

Standard length Artstraws. Ref: 9018
Ideal for children from 4 to 9 years old for making masks, pictures, flowers, models, etc.
Contains about 120 jumbo straws, 90 normal straws and instructions.

Extra long Artstraws (weaving pack). Ref: 9017
For age 5 years to adult. Fascinating models can be made using the weaving technique that is possible with these 17 inch long Artstraws. Contains about 50 jumbo straws, 250 normal straws and full instructions.

Bulk Economy Cartons: Ideal for schools and clubs. Normal straws. Ref: 9030.
Carton of about 1,800 17 inch long normal straws with instructions.

Jumbo straws. Ref: 9031
Carton of about 900 17 inch jumbo straws with instructions.

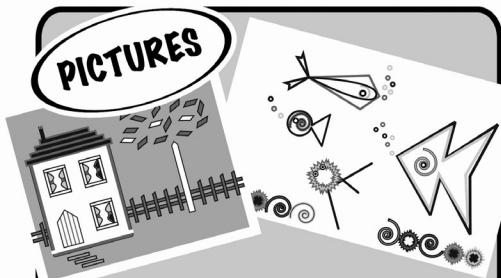
Ideas leaflets
Please send s.a.e. for our Christmas leaflet or Easter leaflet.



Artstraws Limited
6-7 Wyndham Court
Swansea Enterprise Park
Swansea SA6 8RB
Tel: (01792) 796151
Fax: (01792) 700540

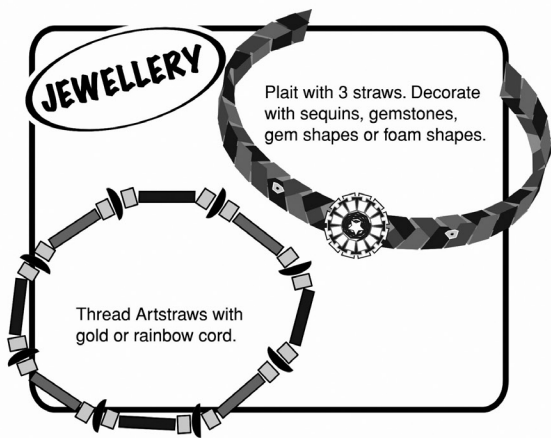
**Distributed in the USA by
The Chenille Kraft Company
Gurnee. IL60031 USA
Tel: 800 621 1261**

PICTURES



Use Artstraws with other materials (wiggly eyes, shredded foil, Art Roc, foam shapes, pipe cleaners etc) to create pictures and patterns.

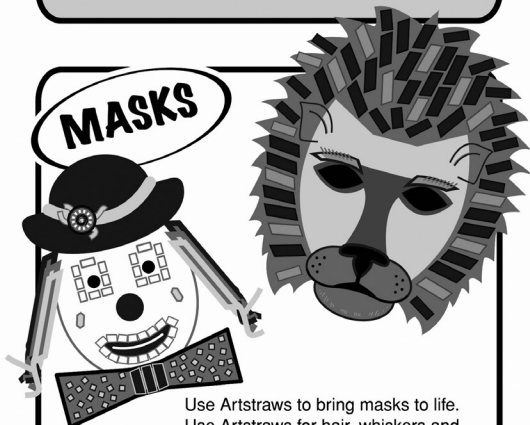
JEWELLERY



Plait with 3 straws. Decorate with sequins, gemstones, gem shapes or foam shapes.

Thread Artstraws with gold or rainbow cord.

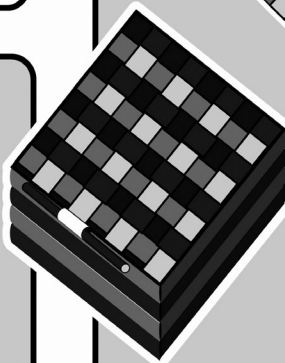
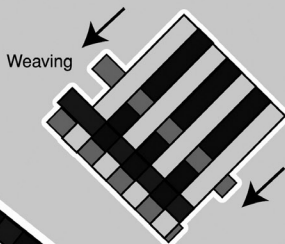
MASKS



Use Artstraws to bring masks to life. Use Artstraws for hair, whiskers and to create features.

CONTAINERS

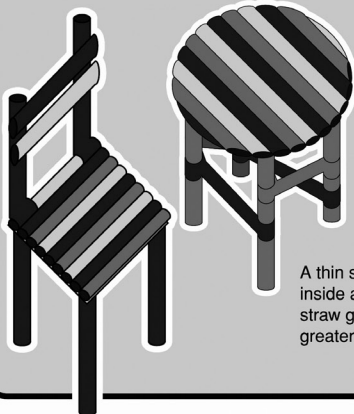
Cover cardboard or plastic containers with woven or plaited Artstraws. Decorate with more Artstraws, sequins, foam or wooden shapes.



Plaited Artstraws woven around a plastic pot.

FURNITURE

Stick Artstraws onto pieces of card to create the basic shape.

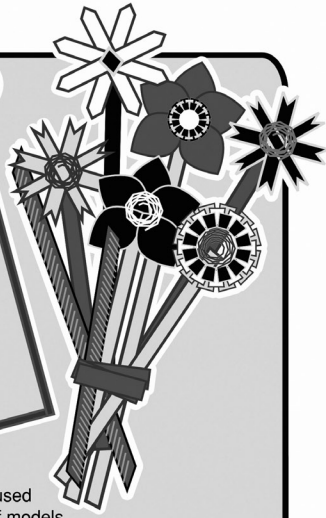


A thin straw inside a fat straw gives greater strength.

ARTSTRAWS

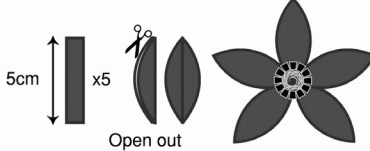
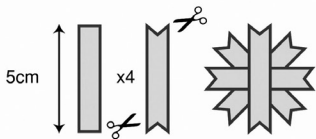
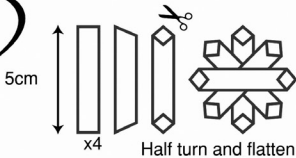
- Stick with white paper glue (PVA). It will dry clear
- Cut with scissors
- Use both thick and thin straws
- You can cut, stick, plait and weave the straws

FLOWERS

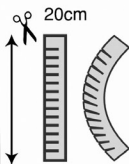


Flower heads can be used to decorate all kinds of models.

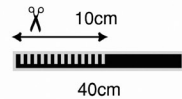
FLOWER TECHNIQUES



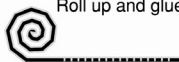
Flower Leaves



Flatten Artstraw



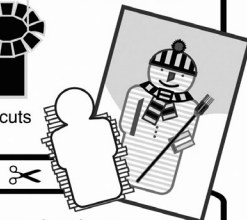
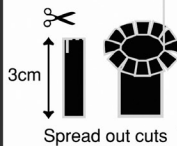
Start with uncut end
Roll up and glue end



Spread out cuts

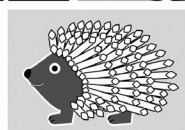
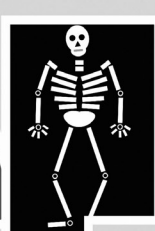


Flower Centre



CARDS

Draw the outline shape and stick on straws to give a 3D effect e.g. windows and tiles on a house, candles on a cake, whiskers on an animal.



Draw a snowman shape on paper and cut it out. Stick straws onto the shape so it is completely covered. When dry, turn the snowman over and cut round the shape to trim off the excess straws. Stick the snowman shape to a card, decorate with more Artstraws, wiggle eyes etc.

Other items used available from

creation station

Artstraws Ltd
Swansea SA6 6RB
Tel: 01792 736151
Fax: 01792 700540
E-mail: info@artstraws.com

8

Leaflet No.

8

WHAT CAN I MAKE?

Look inside for lots of ideas

IT'S EASY, IT'S FUN!