## Sanding Wood



You will need:

- Sand paper
- Sanding block
- Protective gloves
- Rough wood
- Dustpan and brush
- Clamp
- An old table or workbench
- Newspaper (or a dust sheet)


## What to do:

1. Cover floor and table edge with newspaper or a dust sheet.
2. Fix clamp to table edge and open the clamp to the correct width of the wood. Tighten the clamp around the wood by turning the handle clockwise.
3. Put on protective gloves.
4. Wrap sandpaper around the sanding block.

5. Check the direction of the grain (the lines) in the wood. Rub the sanding block over the clamped wood in the direction of the grain, until the wood is smooth.
6. Remove the wood from the clamp and turn it over.
7. Repeat stage 5 on the other side of the wood.
8. Repeat stage 6 to enable each side to be sanded.
9. Sweep dust from wood and clamp onto newspaper, and put away clamp and smoothed wood to be put in wood storage area.
10. Tip newspaper contents into dustpan. Roll newspaper and place it in the recycle paper basket.
11. Remove gloves and put them in wood work storage area.
12. Empty dustpan into compost bin and put away pan and brush.

## Covering an Exercise Book



## You will need:

- brown or coloured paper
- scissors, ruler and exercise book
- sticky tape with dispenser
- protective mat, pen and pencil
- sticky label (optional)


## What to do:

1. Open the exercise book out fully and measure the width and height of the opened book.
2. Add 8 cms to each measurement. Take the paper, mark out the size and cut out a rectangle.
3. Lay the brown or coloured paper (best side down) in the centre of the mat.
4. Fold the paper in half down the middle to find the central point of the paper.
5. Open the exercise book out fully, and place the centre of the book on this fold.
6. Turn all the pages to the back, leaving the cover in place.
7. Turn the flap on the left by the front cover over and hold it in place with a small piece of sticky tape about 3 cms long.

8. Close the book. Fold the back flap under and crease. Open the book and stick the back flap where you have creased it..
9. Open the exercise book out fully showing the middle pages of the book.

10. Cut an upside down $V$ shape in the paper below the central fold of the book. Then cut a $V$ shape in the top of the paper by the central fold of the book.
11. Turn back to the inside of the front cover and turn the top and bottom flaps over.

12. Open them again and fold the bottom left hand corner in diagonally, and stick it down with a piece of sticky tape about 3 cms long.
13. Turn the flaps over again and stick all the other folded corners down with a piece of sticky tape about 3 cms long.
14. Write your name and the subject on the cover, or if the paper is very patterned use a sticky label to write it on.


## Other ideas:

In step 10, instead of cutting out ' $V$ ' shapes, cut diagonal lines which do not meet and then fold the flap under between the paper and the book. This makes the cover stronger.

## Tying a Reef Knot

## You will need:

- one length of yellow rope and one length of green rope


## What to do:

1. Hold the ends of the two pieces of rope, one in each hand. Wrap the end of the green rope over then under the end of the yellow rope.

2. Now take the free end of the green rope and place it right over and then across the end
3. Wrap the green rope right around the yellow rope and up through the hole in the middle, then pull both ends of the rope tightly.
4. Untie the reef knot, by pulling the two ends of the yellow rope.

## Tip:

After step 2, make sure the two pieces of green rope are on the same side of the yellow rope. If you don't
 do that you will get a granny knot, which is not a good knot.

## Other ideas:

Teach a friend how to tie a reef knot.
How many other sorts of knot can you find out about?
Find out what they were used for.
Make a display showing some different types of knots.

You use a reef knot when you want a knot which will not slip undone when you pull the long ends of the two strings. However, a reef knot is also good, because it is undone easily by pulling one short and one long end of the same piece of string.

## Wrapping a Gift



## You will need:

- a tray
- a selection of small boxes
- a selection of wrapping paper pre-cut to the right size
- sticky tape and a dispenser or scissors
- a protection mat


## What to do

1. Carry the tray to the table or collect your items together on to the tray.
2. Lay out the protection mat.
3. Choose a gift to wrap and put it at the top left of the mat.
4. Choose a piece of gift wrap and put it to the right of the gift.
5. Put the sticky tape and dispenser on the right.
6. Take the paper and turn it upside down.
7. Put the gift in the middle of the paper.
8. Fold over about 2 cms of paper, on the edge of the paper that is nearest you.
9. Turn the whole sheet of paper round so that the other edge of the paper is nearest to you.
10. Fold in about 2 cms of paper.
11. Cut a piece of sticky tape about 3 cms long and leave it ready on the dispenser.
12. Take the nearest edge of paper to the middle of the box, and hold it there with one finger, while you bring the furthest edge to the middle of the box on top of it.
13. Hold the edges together with one hand, while you put the piece of sticky tape which you have cut on the paper to join it together.
14. Cut another piece of sticky tape about 3 cms long and leave on the dispenser.
15. Turn box so that one of the sides is nearest you.
16. Fold each corner of the paper over to make a triangle.
17. Fold the whole piece towards the centre of the box and fix with sticky tape.
18. Repeat steps 14 to 17 with the other side of the box.
19. Turn the box over. Your gift is now ready.

## Other Ideas:

- add a pom pom or add a gift tag
- tie the gift with string so that it can be hung on a Christmas tree
- use different size boxes and cut your own gift wrap


## Making a Book Mark



## You will need:

- Strips of white card.
- Coloured crayons (or felt tip pens)
- Scissors (patterned edge type)
- Waste bowl for paper cuttings


## What to do:

1. Cut the edges of the card to your own design, (using the special scissors).
2. Use the crayons to colour both sides of the bookmark and write your name at the top.
3. Put the bookmark in your folder or home tray and empty the waste card into the collage tray or re-cycle bin.


## Other Ideas:

Tie ribbons or wool to the end of the bookmark through a punched hole.

Put a pressed flower onto the book mark and laminate it. Use collage mosaic paper (photograph of bone shaped bookmark with animal print paper collage).


Copy out or write your own poem on the bookmark.
Make a gift tag (from old Christmas card)
Make a luggage label, folded to include both in-bound and outbound information.

## Making a Friendship Bracelet



## You will need:

- a tray
- a container with 3 different colour wools
- sticky tape
- scissors
- a protection mat
- a ruler


## What to do:

1. See if there is a tray already made up. If so carry it to the table. If not, take an empty tray and collect the items.
2. Lay out the protection mat, and put out the items in this order from left to right at the top of the mat - wool, scissors, invisible tape.
3. Choose 3 different colour wools, and cut a length of each, the size of your arm.
4. Lay out the 3 pieces of wool side by side vertically i.e. from top to bottom on the mat.
5. Make a loop and tie a knot with all the pieces about 4 cms from the top. Use the ruler if you are not sure how long 4 cms is.
6. Cut a piece of sticky tape about 4 cms long and use it to stick down the top of the pieces of wool above the knot, to hold the threads in place.

7. Separate the 3 pieces of thread and hold the piece of thread on the far right in your hand.
8. Bring the piece of thread (from the far right) over the other 2 pieces and form this sort of number 4.
9. Pull the same piece of thread under
 the 2 pieces and pull it through, creating a loose knot.
10. Slide the knot to the top, and gently tighten it.
11. Continue as above taking the next colour of thread onto the right hand side and creating a " 4 " with the 3 pieces of thread, and pulling the thread through each time, sliding the knot to the top.
12. Continue until the bracelet is the right size.
13. Tie the 2 ends together with a reef knot, and cut off any loose ends.
14. Give the bracelet to a special friend.

Other Ideas: Use embroidery thread and add small beads to every second ' 4 ' before knotting it.

## Making a Geoboard



You will need:

- Square piece of wood, with about $150-200 \mathrm{~cm}$ sides
- Hammer and nails
- Pliers
- Gimlet (or bradawl or mini-drill)
- Pencil
- Sheet of cardboard as big as the wood
- Circular template slightly smaller than the wood
- Scissors
- Fine sandpaper
- Coloured rubber bands


## What to do:

1. If the piece of wood is rough, use the sandpaper to sand it down. Remember to sand in the same direction as the grain of the wood.
2. Use the template to draw a circle onto the wood. Make sure the circle is central and do not press hard with the pencil.
3. Use the template to draw a circle on the card. Cut it out. Now fold the circle exactly in half and cut it.
4. Use the half-circle to find the two opposite sides of the circle on the wood, and mark the positions with the gimlet, making a very small hole.
5. Fold the card half-circle in half again, and cut it. Use the quarter-circle to find the positions of the two places on the circle exactly half way between the first two marks, and mark the new positions with the gimlet.
6. Fold the card quarter-circle in half again and cut it. Use the eighth-circle to find four more points around the circle, and mark them with the gimlet.
7. Carefully sand off the pencil circle.

8. Hold a nail with the pliers in one of the holes, and hammer it firmly into the wood. Do not hammer it right through to the other side.
9. Hammer in the other 7 nails.
10. Now you can use your geoboard with the rubber bands to find what shapes you can make.

How many triangles can you find? How many squares? Can you find any other shapes?
Other Ideas: Make geoboards with different numbers of nails in the circle. (Hint: you will have to measure the positions of the nails by measuring round the circle)

Make a geoboard with a square grid of nails - say 5 nails across and 5 nails up making 25 nails altogether. How many shapes can you make now with the rubber bands?

## Making a Paper Ice-Crystal

## You will need:

- a tray
- 1 A4 black or blue coloured paper
- 1 smaller white paper
- scissors and a pencil
- a triangle template
- a crystal template
- a sticking mat, glue and a roller


## What to do:

1. Place the white paper so that the short side is at the top. Fold in half like a book.
2. Draw around the triangle template.
3. Cut along the two lines.

4. Mark ' $x$ ' in pencil at the centre. Fold the sides under to make one triangle.

5. Put the crystal template on the triangle with the point at ' $x$ '. Draw round and cut out along your lines.
6. Unfold and put the ice crystal on the sticking mat. Squeeze glue carefully and use roller to stick it onto the black or blue paper.

7. Ask a teacher to help you find some facts about ice crystals and write them down. Look at some snowflakes with a magnifying glass.


Triangular template

Crystal template


The crystal template must fit the triangular template exactly, and the small piece of paper needs to be twice the length of one side of the triangle, by twice its vertical height. These are best cut out in stiff card.

## Making a Notebook



## You will need:

- a tray
- 3 small pieces of paper (A5)
- scissors
- a protection mat


## What to do:

1. Lay out the mat.
2. Choose 3 pieces of paper and fold them neatly in half.
3. Put them all together into a booklet.
4. Make a series of small cuts down the fold about 1 cm apart and 1 cm long.
5. Fold the paper between the cuts forward and backwards in turn.

6. Now your notebook is ready to use.


## Other Ideas:

You may choose to use any of the following ideas, if you wish. Use a pencil and ruler to make the right size cuts.

Punch the book with a hole punch and add treasury tags to hold it together.

Make a patterned cover, with plain paper inside.

