

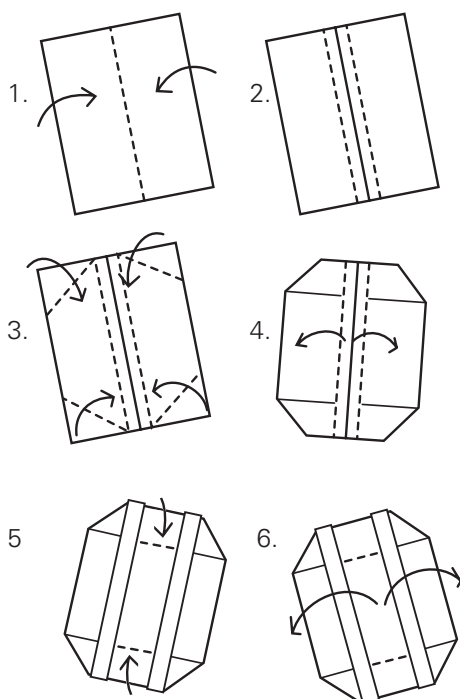
## ORIGAMI BOX

**THINKING SKILL:** information processing, creative  
**SUBJECT LINK:** art, mathematics  
**LEARNING LINK:** auditory  
**ORGANISATION:** pairs  
**RESOURCES:** two 20cm by 20cm squares of thin coloured card for each child; a set of instructions for making an origami box and lid for each pair

### WHAT TO DO

- In pairs, the children decide who is going to read out and interpret the instructions and who is going to construct the box. These roles should then be reversed for making the lid.
- When the children have finished, display the results and hold a discussion about how they found the exercise – both in terms of interpreting instructions and working as a pair.

1. Fold a sheet of paper in half and then open it up again. Fold each side edge (parallel to the crease) to meet in the centre (as shown).
2. Fold the edges in the centre back by 1cm. Then fold them back to their original position.
3. Fold the outer corners to the crease of the previous (1cm) fold.
4. Fold back the (1cm) flaps over the corners.
5. Fold the bottom and top parts of the shape as indicated (the crease should be along the edge of the corner that has been folded over). Return them back again.
6. Put your thumbs behind the flaps and pull them back to form the box. Pinch the corners edges of the box to make it stand up



## SPIROLATERALS

**THINKING SKILL:** information processing  
**SUBJECT LINK:** mathematics, art  
**LEARNING LINK:** visual  
**ORGANISATION:** individual  
**RESOURCES:** ruler; pencils and colouring pencils; squared paper

### WHAT TO DO

- Start to create a table for the times tables up to 12. The children can copy it and complete it. It should be an extended version of the following:

2-times table	Digit addition	3-times table	Digit addition
$1 \times 2 = 2$	2	3	3
$2 \times 2 = 4$	4	6	6
$3 \times 2 = 6$	6	9	9
$4 \times 2 = 8$	8	12	3
$5 \times 2 = 10$	$1 + 0 = 1$	15	6
$6 \times 2 = 12$	$1 + 2 = 3$	18	9
$7 \times 2 = 14$	$1 + 4 = 5$	21	3
$8 \times 2 = 16$	$1 + 6 = 7$	24	6
$9 \times 2 = 18$	$1 + 8 = 9$	27	9
$10 \times 2 = 20$	$2 + 0 = 2$	30	3
$11 \times 2 = 22$	$2 + 2 = 4$	33	6
$12 \times 2 = 24$	$2 + 4 = 6$	36	9

- In the column headed 'Digit addition', the sum of the digits in the times table column to the left has been added until a single digit is achieved.
- Once this has been completed, discuss the patterns that have emerged.
- Ask the children to choose one of the tables and on squared paper, draw a line the length of the first number. For example, for the 3-times table, draw a line 3cm long. Now turn the page 90 degrees to the right (or left – but turn it the same way each time!) and draw a line 6cm long from the end point of the first line. Then turn the page 90 degrees to the right again and draw a line 9cm long. Continue doing this until you return to the beginning of your pattern and your lines are retracing themselves.
- The children can then decorate the patterns that emerge.

