LESSON 22 LEVEL C PAPER CONSTRUCTIONS

WHAT YOU WILL LEARN: folding paper to make a functional form

WHAT YOU WILL NEED: Squares of paper 23 cm \times 23 cm $(9'' \times 9'')$ and 21.5 cm \times 21.5 cm $(8 3/4'' \times 8 3/4'')$; scissors

TIPS: Use construction paper for the first box and be sure the dimensions are correct. After you have learned the process, you can make "nests" of boxes of various sizes and different kinds of paper. Be sure to cut the papers accurately. Each box and cover require one piece and a second one very little smaller. Refer to the diagram as you work.

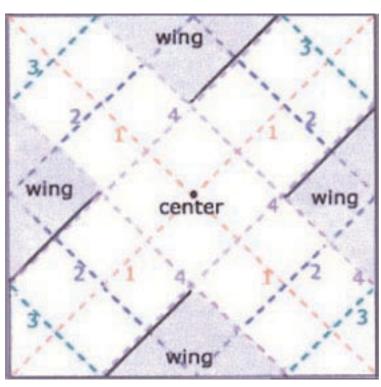


Diagram of Folds --- and Cuts ___

BOXES AND COVERS



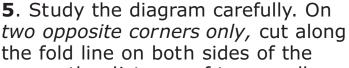
Nested Boxes

GETTING STARTED: You can make boxes with covers of folded decorative paper for your own use or as gifts or gift containers. The paper can be decorated before forming, with some of your own art work: vegetable prints, crayon-resist watercolor, or seasonal sketches.

- 1. To make a square box, fold the smaller square paper diagonally. Open it. Fold the other diagonal. Open it flat. You will have a fold line from corner to corner, both ways.
- 2. Bring each corner, one at a time, to the center of the square and crease the folds. Open the whole square and lay it flat.
- 3. Now bring each corner, one at a time, just slightly forward to the closest fold line (made in step 2.); crease; open flat.



4. Bring each corner, one at a time, to the middle of the fold that is just beyond the center. (This is also the fold you made in step 2, but on the other side of the center line.) Crease it. Open the square again. You should see many small squares on the paper. If you do not, check to be sure you made a complete set of folds (four) each time.





Box in progress

- corner the distance of two small squares. Stop one line before the central diagonal line. These corners will look like "little houses."
- 6. Now fold each of these two points to the center. Crease the fold. Fold the folded edge up to form opposite walls of the box. Open the folds and lay them flat again.
- 7. Bring the other two corners to the center in the same way, forming the third and fourth walls of the box. Bend the "wings" at right angles and hold them in place with paper clips if you need to.
- 8. Bring the first corners up, over, and down to the center, locking in the wings and completing the box. A bit of glue will hold the middle points in -place.
- 9. Repeat all the steps with the larger paper to make the cover.

CLEAN UP: There is not much to clean up after this lesson! Look around. Is everything where it belongs?

TALK ABOUT IT: What was the hardest part of making the box? Now that you know how and have practiced, could you make a whole set of "nesting" boxes that fit inside one another? What is the smallest size you can make?

MORE IDEAS: After folding and before cutting, decorate the surface that will show. Draw, paint, or print onto each little square or glue some cut-out paper designs on the top. Put small treasures inside for yourself or a gift for a friend.

CONNECTIONS: Make a list of the many kinds and uses of boxes: jewel boxes, corrugated cardboard packing boxes, etc. How many kinds of boxes can you find in your own room? In your house?