# wonder

## **BOX ECOLOGY**

### Goal

This activity will demonstrate how to transform a greeting card into a box—the ultimate "re-use it" project! Once constructed, it can be filled with special notes and given to someone or it can be filled with keepsakes for years to come.

### **Materials**

- 1 greeting card—rectangle shape works best
- Ruler or straight edge
- Pencil
- Scissors
- Tape

### How to Do it

- 1. Open the greeting card and lay it flat.
- 2. Find the middle of both sides of the card. Use your ruler or straight edge to draw a diagonal line from the top corner to the opposite corner on the bottom. Both lines should form an X on your card—the middle of the card is where the lines meet.
- 3. Cut along the fold of the card—you will end up with two rectangles.
- **4.** Cut out two small semi-circles on the longer sides of the rectangle that was the cover of the card.
- 5. On the same rectangle that you cut the semi-circles, fold all sides to within 1/4'' from the X—this will be the cover of your box.
- 6. On the other rectangle, fold all sides exactly to the middle mark.
- 7. Lay the card flat in front of you so the shorter side of the rectangle is on the bottom.
- 8. Create a dotted line from the fold to the bottom and top of the card.
- 9. Make four cuts in each rectangle along the dotted lines only.
- **10.** Fold each rectangle on the lines.
- **11.** The project should form the shape of box.
- **12.** Secure the ends of the box with tape.







Wonder Kids is a program developed by Chicago Children's Museum and the Museum of Science and Industry, with generous funding from Allstate.

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#### **Discussion Questions**

The standard greeting card is a rectangle. How would the activity change if you used a square-shaped greeting card?

### **Extension Activity**

Find a card that you could transform into a smaller box or a larger box.

### Adaptation for Early Learners: Make a Paper Cup

Depending on the age of the child, adults will need to lead the folding in the following activity. However, this is an opportunity for children to participate in the making of shapes: start with a *square*, make a *triangle*, etc. Ask your early learner to help identify the shapes he or she sees as you do the activity together.

- 1. Using a square piece of paper, bring opposite corners together and fold into a triangle.
- 2. You will have a triangle with two short sides and a long side. Place the triangle on a table with the long side closest to you (the shape you see should resemble a mountain).
- **3.** With a pencil, mark the point near your left hand as "B" and the point near your right hand as "C." Mark the top of the mountain as "A."
- 4. Take point B and fold it across and half way up the other side of the mountain (between points A and C). The point should touch the side; not go over it.
- **5.** Turn the mountain over and make the same fold with point C. You should now have a figure with five sides.
- **6.** The two triangles at the top (point A) should be folded down on the either side of the mountain.
- 7. Find the opening (at the top) and pull the sides apart to form your cup.
- 8. Fill your cup with water and take a sip!





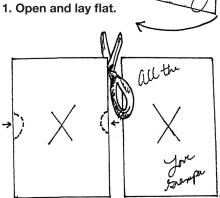


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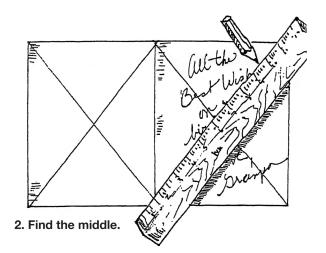


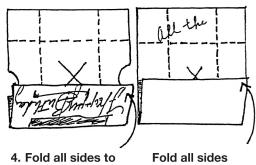
### **BOX ECOLOGY STEPS**





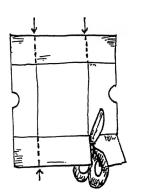
3. Cut apart two rectangles. Cut out two semi-circles as shown.



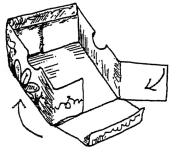


4. Fold all sides to within 1/4" from the middle mark.

Fold all sides exactly to the middle mark.



5. Make four cuts in each rectangle along the dotted lines only.



6. Fold into shape of box and secure ends with tape or glue.



7. Enjoy using your box to give small gifts or to keep small treasures of your own!







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