

Explosion Pop-up Book

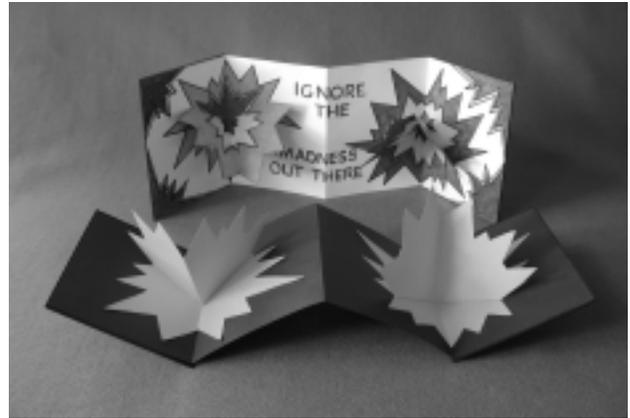
by Judy Christensen

General Description

"Pop-Up" is a general term that encompasses various forms of movable books. At its center is motion created by turning a page, pulling a tab or turning a wheel.

While some pop-ups rely on cuts made in the base page, this pop-up has cut-out shapes with tabs slipped into slits and attached to the base page (the paper page to which the pop-up is attached). It's a great structure—kids love that element of surprise as the cut-out pops into action!

Finished size of the book shown is $5\frac{1}{2}$ x $4\frac{1}{4}$ inches.

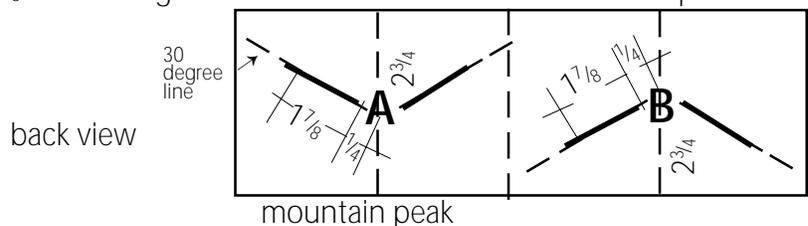
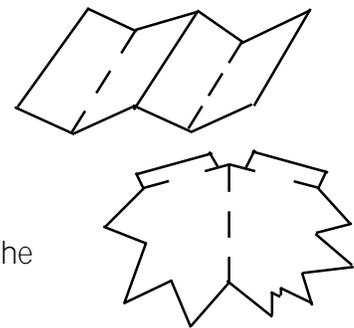


Materials

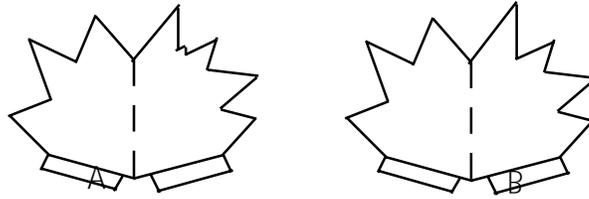
- Paper for the accordion book: $5\frac{1}{2}$ inches by 17 inches
- Paper for the exploding shapes: 2 of the small, pop-up shapes.
90-lb. paper is a good weight. If you buy 11" x 17" paper, you can cut it in half for the accordion.
- Optional—if you use a contrasting color under the pop-up shape: paper for 2 of the large shapes*
- Two pieces of heavy cardstock or mat board, $4\frac{5}{8}$ by $5\frac{5}{8}$ inches
- Pencil
- Markers, Colored Pencils &/or Gel Pens
- Scrap Paper (for gluing)
- Ruler
- Utility Knife
- Glue Stick
- Protractor
- Scissors
- Tape

Procedure

1. Fold the $5\frac{1}{2}$ x 17 inch sheet in half, then in half again, resulting in a four page accordion book. Refer to the folding directions for the *Accordion Book* found in this booklet.
2. Cut out two small pop-up shapes and fold in half. Then fold along the bottom dotted line for tabs. The tabs fold in the opposite direction from the center fold. (Patterns on page 16.)
3. In the accordion book, mark in pencil on the back for attaching the exploding shapes:
 - a) Along each of the two peaks (the fold like a mountain peak), mark in pencil on the crease:
For one, come down $2\frac{3}{4}$ inches from the top. Write A near the point mark.
For the other, come up $2\frac{3}{4}$ inches from the bottom. Write B near the point mark.
 - b) Using the protractor, draw a light pencil line from your point mark at a 30-degree angle in both directions away from the peak. Draw the line towards the edge you measured from. (For A, draw upward. For B, draw downward.)
 - c) From the peak (fold), come out $\frac{1}{4}$ " along each line you've drawn and draw a darker line, over your original line, that is $1\frac{7}{8}$ inches long.

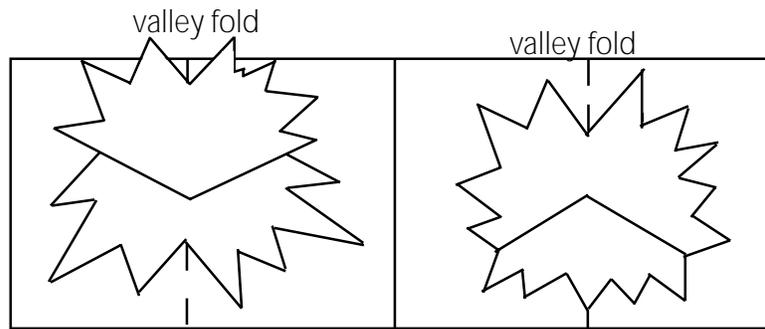


- With the knife, cut along the 4 dark lines you've drawn. This allows you to insert the exploding shapes and plan the design of the book. (Mark A on the tab of one of the small shapes & B on the other so as you design the book you don't get them mixed up.)



- Optional: Glue in large exploding shapes so the longer, pointed rays point away from the direction of the cuts. Line up large shapes so arrows on the templates are at the outer end of the cut lines. Then turn the book over & recut lines, so they go through the shape you just glued in.*

top view of front



- Design and complete text and image in book, on cover and on exploding shapes (both sides of small shape).
- Insert small exploding shapes. Tape the tabs on the back of the book. It's best to do the taping with the book closed to make sure it will close flat. Test it by opening and closing it once the shapes are in place.
- Glue on covers. You're done!

