Tunnel Book

The tunnel book is a unique and sculptural book form. This book creates a small visual environment with overlapping layers. The layers can look different depending on the angle from which they are viewed. Change the size of the viewing hole to give your reader a different experience!

Grades/Age Group: 3rd -12

Approximate Time Required:
Prep: 30 minutes, more if pre-cutting holes in front covers
Teaching: 15 minutes for construction, more for decorating

Teaching Overview:
Materials needed (sizes can be scaled as desired for your class project needs):
1. 3” x 3” chipboard squares (2)
2. 3” x 6” text weight paper (2)
3. Collage materials
4. X-acto knife (or for younger kids, you can cut out the front cover first)
5. Bone folder or plastic knife/popsicle stick (optional)
6. Glue stick
7. Scissors (for cutting collage materials)

Procedure:
1. Fold an 8-panel accordion from each of the 3” x 6” pieces of paper. You should end up with 2 identical accordions.
2. Start with your 3” x 6” text weight paper and fold it in half.
3. Next fold both edges of the paper to meet the first fold you made.
4. Open the paper you have folded and bring each fold over to meet the edge of the paper one at a time and press down to make a crease.

5. This will produce an eight panel accordion:

6. Cut out a hole in one of the chipboard covers.
7. Glue the accordions between the pieces of chipboard with mountain folds facing out.

8. Decorate! But remember to only put your materials on the side of the accordions with the X.
9. Pull the back cover away from you and look into the tunnel!
Core Standard Applications:

Math:

*Kindergarten math.* Objective: Identify and describe shapes. Application: Have students make a tunnel book that is full of shapes and their names.

*4th grade math.* Objective: Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. Application: Have students make a tunnel book about fractions. On the furthest back layer of the tunnel book students could draw a picture of a whole pizza and write the number 1. On each consecutive layer of the tunnel book more of the pizza could be eaten and they could draw another pizza and cut out the part that has been consumed. On the layer closest to the viewer would be an open viewing hole and the number 0 as the whole pizza has been consumed.

Science:

*3rd grade science.* Objective: Classify living and nonliving things in an environment. Describe the interactions between living and nonliving things in a small environment. Application: Have students build habitat in their tunnel book by drawing living and non-living things they would find in a specific habitat.

*2nd grade science.* Objective: Observe, describe and measure seasonal weather patterns and local variations. Application: Have students observe the weather outside
on a few separate days. Each time have them draw pictures and make observations. Turn each of their drawings and writings into a panel for their tunnel book.

Language Arts:

*K-5*th grade language arts. Objective: Read and comprehend complex literary and informational texts independently and proficiently. Have students make a tunnel book about a book they have read drawing pictures of characters and important events or places to demonstrate comprehension.

*6-8*th grade language arts. Objective: Compare and contrast texts in different forms or genres (e.g., stories and poems; historical novels and fantasy stories) in terms of their approaches to similar themes and topics. Application: Have students read a poem and short story that have a similar mood. After a discussion of the two works, have students write their own poem in response to the two works and make a tunnel book that both capture the same mood of the works they have examined. Have students cut out collage images and incorporate the words of their poems into their tunnel books.

Social Studies:

Kindergarten social studies. Objective: Students will recognize and describe how individuals and families are both similar and different. Application: Have students make a tunnel book about their families with their oldest family member at the back of the book and the youngest on the front panel of the book. Students can share their books with each other to learn about how each other’s families are similar and different.

9-12th grade world civilizations. Objective: Students will understand the distribution of power among the national, state, and local governments in the United States federal system. Application: Have students make a tunnel book that has images and text about the levels of government. With national government at the back panel of the tunnel book and local government at the front of the book.