



## Turkish Map Fold

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*The Turkish Map Fold is a unique and sculptural book form made from a single piece of paper, with an optional cover. As you open the book, the piece of paper unfolds so you can see the entire sheet. This book is great to use for a reference worksheet, as it folds down nicely and opens up in an unexpected way. At the end of this lesson plan are lesson ideas to incorporate the Turkish Map Fold into Utah Core Curriculum standards. This lesson plan supports Reading: Literature Standards 3, 4 and 7. It is strongly advised that the teacher attempt to make this book form at least once before teaching to a class. To demonstrate this book to the class, it is best to use a printed sheet of paper or a duotone sheet of paper (different colors on each side).*

**Grades/Age Group:** 6th-12th

**Approximate Time Required:**

Prep: 30 minutes

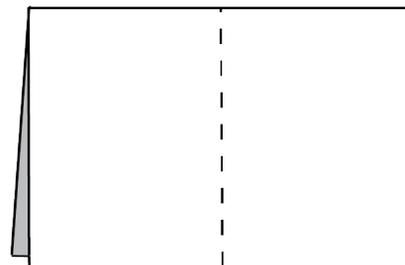
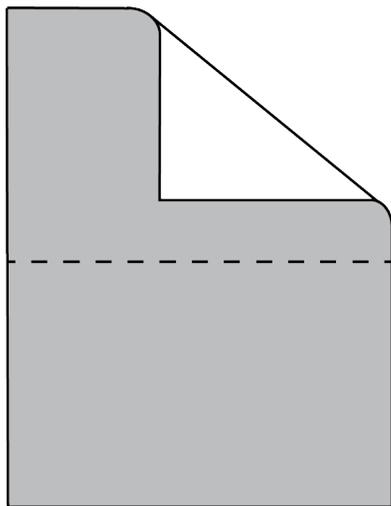
Teaching: 30 minutes

**Materials needed (sizes can be scaled as desired for your class project needs):**

1. 8 1/2" x 11" text weight paper (1 per person)
2. 4 3/8" x 11" cover weight paper (1 per person) for optional cover
3. Glue stick

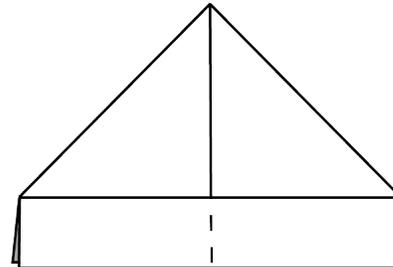
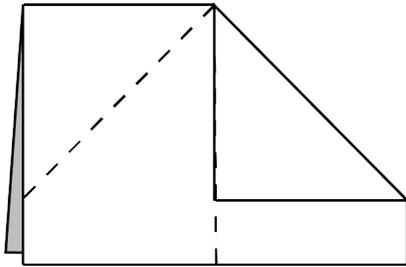
**Procedure:**

1. Start with the 8 1/2" x 11" text weight paper and fold in half widthwise. If there is a printed side to your paper, make sure the printing is folded on the inside. Keeping everything folded, fold in half again widthwise. Now unfold just once. You'll see a vertical fold line right down the middle of your folded paper.

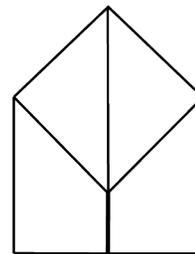
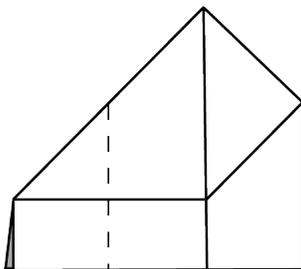




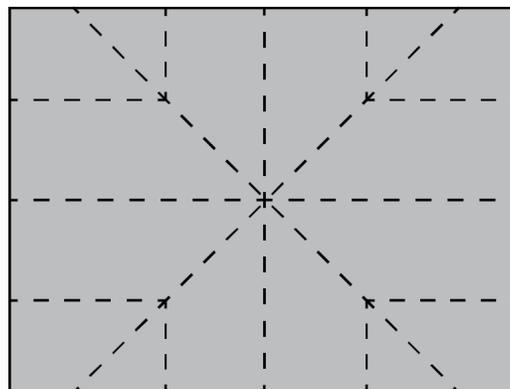
2. There is an open edge and a folded edge of the paper. From the folded edge, bring a corner to meet the central fold line. Do the same with the other corner.



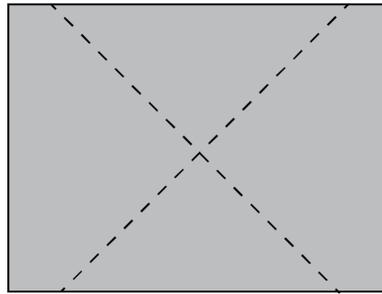
3. Keeping everything folded, bring in the edges to match up with the center fold.



4. Now unfold the paper to the printed side. The dashed lines in the diagram represent the folds you will see on your paper.



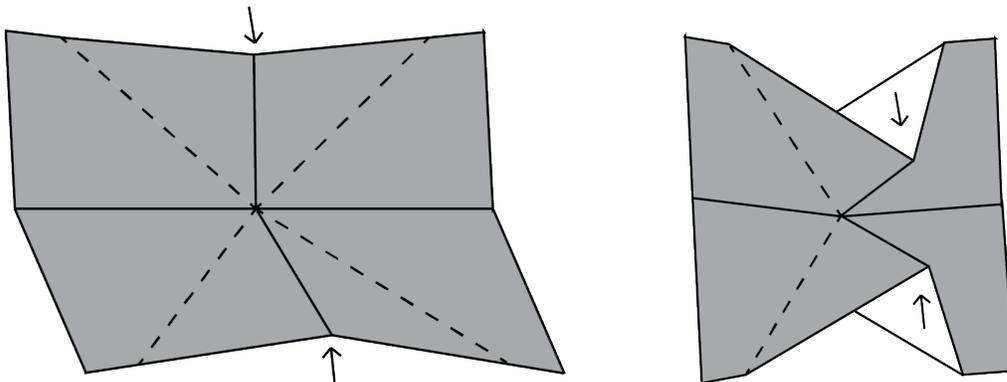
5. Look for the two diagonal fold lines on your paper (illustrated in the first diagram on the following page). Reinforce the fold along these diagonal lines by folding your paper as illustrated in the second diagram. Unfold, and fold again as illustrated in the third diagram. Make sure the printed side of your paper is folded on the inside.



6. Refold your paper in half widthwise, with the printed side on the **outside**.



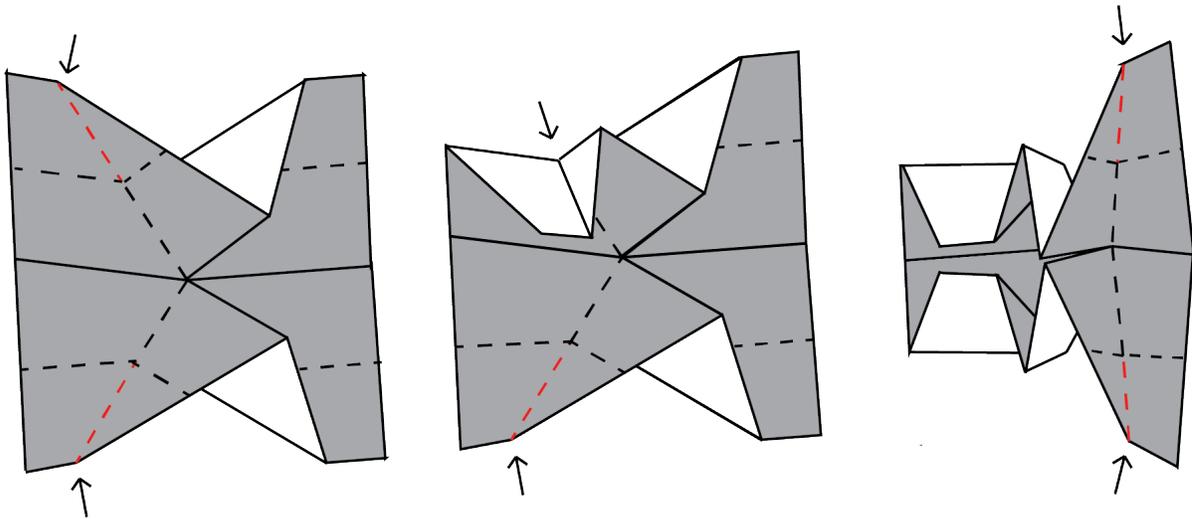
7. Unfold the last fold and lay your paper printed side up. Press in the center of the paper, and the widthwise center fold should pop up. The arrows in the first diagram point to these folds. Bring the two widthwise folds together as illustrated in the second diagram.



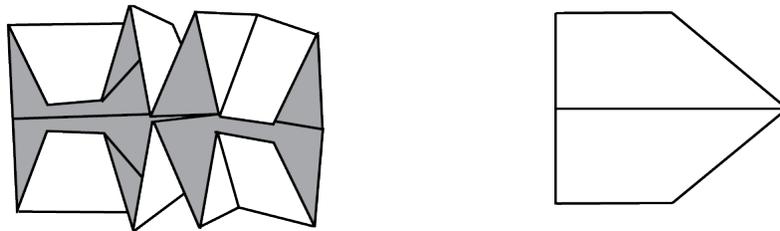
8. The next step may be the trickiest step. Reverse the diagonal folds indicated in red so that they fold in (first diagram). The second diagram shows how one fold will look



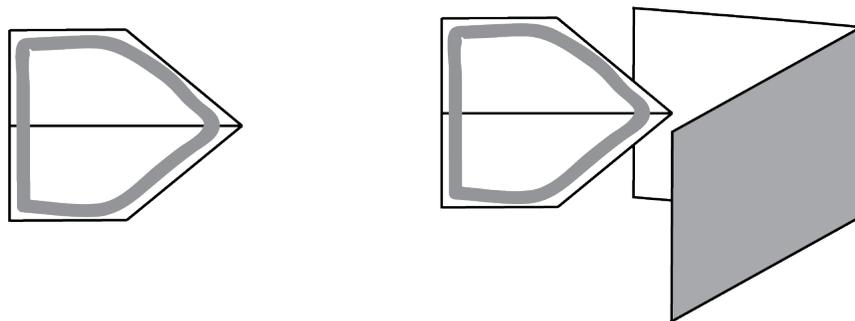
once folded in. You will likely need to work the paper for a bit to achieve this fold. You will do this fold four times, two on each side.



9. Your Turkish Map Fold will look like the first diagram when folded but not completely closed, and like the second diagram when completely closed.



10. Now it's time to add the cover. Fold the  $4 \frac{3}{8}$ " x 11" cover weight paper in half widthwise. Close the Turkish map fold. Add glue to the perimeter of the closed map on both sides. Place the folded map inside the cover, with the point of the map in the fold of the cover. Center between the top and bottom edges, then close the cover and press to adhere.





## ***Turkish Map Fold – Lesson Overview:***

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### **Key Points:**

1. Any worksheet can be folded down into a Turkish map fold. This would work particularly well for a sheet that would need to be referenced again and again such as the color wheel, a guide to APA or MLA style citations or the parts of a cell.

### **Ideas for Innovation:**

1. Students can create the content themselves or fill out a worksheet.
2. Multiple Turkish map folds can be glued back to back to form a carousel of sheets.
3. The Turkish map fold may be made with or without the cover.

### **Learning Objectives:**

1. Students will increase their dexterity skills by folding, cutting, and gluing accurately.
2. Students will explore new ways to interact with what they're learning.
3. Students will have foundational skills for making simple books on their own.
4. Glue several folded worksheets together to make a sculptural book!

### **Core Standard Applications:**

#### Reading:

*K-5th Reading: Literature Standard 7.* Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Application: Make a Turkish map fold out of a blank sheet of paper. Over the course of the next week, ask the students to carry their Turkish map fold with them, and make a note on a picture or movie that catches their eye. The students may summarize the movie, billboard, advertisement, video or painting that they see in a sentence or picture.

*6<sup>th</sup>-8<sup>th</sup> Reading: Literature Standard 3.* Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.

Application: Before reading a book with the class, have each student make a Turkish map fold. While the class is reading the novel, ask the students to write in their Turkish map fold how they notice characters changing or the plot thickening. Ask them to pay attention to moments that they are surprised or confused by what is happening. The students can compile their notes at the end of the novel to see how the story or characters developed.

*9<sup>th</sup>-12<sup>th</sup> Reading: Literature Standard 4.* Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the



cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).  
Application: Before reading a book with the class, have each student make a Turkish map fold. While the class is reading the novel, ask the students to note in their Turkish map fold words they don't know or phrases they don't understand. Students will conduct research to determine meaning, and write a brief paragraph explaining how the meaning of the words or phrase relate to the context of the book. Alternatively, students could note the use of metaphors, similes, puns, paradoxes, hyperboles, etc. in the text. Students will write a brief paragraph to determine how these language devices support the meaning and tone of the text.

#### Math:

*4<sup>th</sup> grade.* Objective: Use the four operations with whole numbers to solve problems.  
Application: Make a worksheet that outlines the order of operations and have students fold into a Turkish map fold for reference.

*8<sup>th</sup> grade.* Objective: Understand and Apply the Pythagorean Theorem.  
Application: Have a reference worksheet with information about the Pythagorean Theorem and have students fold into a Turkish map fold for reference.

#### Science:

*2<sup>nd</sup> grade Science.* Objective: Analyze objects and record their properties.  
Application: Have a premade grid made on a piece of paper. Have students draw and write information about different non-living objects and their properties. Fold down into a Turkish map fold. A companion book can be made with the properties of living creatures.

*7<sup>th</sup> grade Biology.* Objective: Students will understand that the organs in an organism are made of cells that have structures and perform specific life functions.  
Application: Have students make a Turkish map fold with the different parts of the cell and their functions listed.

#### Language Arts:

*3<sup>rd</sup> grade.* Objective: Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.  
Application: Have students write a short narrative poem and illustration on a single sheet of paper and fold down into a Turkish map fold.

*9-12<sup>th</sup> grade.* Objective: Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings.



Application: Make a worksheet that compares figurative and connotative language and have students fold into a Turkish map fold for reference.

Social Studies:

*Kindergarten.* Objective: Students will use geographic terms and tools.

Application: Have students draw a map of their classroom or playground using geographic terms and tools. Fold down into a Turkish map fold.

*9-12<sup>th</sup> grade.* Objective: Students will understand the significance and impact of the Constitution on everyday life.

Application: Have students fold down a copy of the Constitution into a Turkish map fold. This way they can carry it in their pockets and reference it during lessons and daily life.