

Seminar on Teaching about East Asia
2008 – Marietta College
Marietta, Ohio

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Teacher Implementation Plan (TIP) **Lesson Plan for Japan** **Origami**

Purpose: To introduce students to the history of origami, the geometry concepts associated with origami, and hands-on construction activity.

Essential Question(s):

- What is the significance of origami in the Japanese culture?
- What significance or role does geometry play in the construction of origami?

Grade Level: 6th, 7th & 8th grade

Objectives:

Social Studies:

Students will interpret the world in spatial terms with the use of maps, globes and other geographic tools and distinguish relationships among people, ideas and events.

Mathematics:

Students will use and apply appropriate techniques and tools to determine measurements while using three-dimensional geometric shapes to form origami figures; students will actively engage in tactile learning through spatial reasoning.

Standards:

West Virginia

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| • SS.S.6.4 | SS.S.7.4 | SS.S.8.4 |
| • SS.S.6.5 | SS.S.7.5 | SS.S.8.5 |
| • SS.S.6.6 | SS.S.7.6 | SS.S.8.6 |
| • MA.S.6.3 | MA.S. 7.3 | MA.S.8.3 |
| • MA.S.6.4 | MA.S.7.4 | MA.S.8.4 |

Materials Needed:

Paper
Scissors
Ruler
Pencil
Scoring Tool
Cutting Mat

Required Time for Project:

Minimum of five – 45 minute class periods

Assessment:

Completed origami project

Resources:

- Baicker, Karen. Origami Math Grades 2-4. New York, Scholastic, 2004.
- Baicker, Karen. Origami Math Grades 4-6. New York, Scholastic, 2004.
- Biddle, Steve & Biddle, Megumi. Origami Inspired by Japanese Prints. New York, Penquin Putman, 1998.
- Encyclopedia of Origami and Papercraft Techniques, The. Edited by Emma Callery. Edison, NJ, Chartwell Books, 1995.
- Gross, Gay & Weintraub, Tina. Easy Origami Step-by-Step Projects that Teach Across the Curriculum. New York, Scholastic, 1995.
- Kawamura, Miyuki. Polyhedron Origami for beginners. Tokyo, Nihon Vogue Co., Ltd, 2001.
- Linde, Barbara. Origami Identifying Right Angles in Geometric Figures. New York, The Rosen Publishing Group, 2004.
- Montroll, John. A Plethora of Polyhedra in Origami. New York, Dover Publishing, Inc., 2002.
- Nguyen, Duy. Origami Myths & Legends. New York, Sterling Publishing Co., Inc., 2005.
- Robinson, Nick. The Origami Giftbox. Buffalo, NY, Firefly Books, Inc., 2006.
- Robinson, Nick. The Origami Bible A Practical Guide to the Art of Paper Folding. Cincinnati, OH, North Light Books, 2004.
- Stalcup, Ann. Japanese Origami: Paper Magic. New York, The Rosen Publishing Group's Power kids Press, 1999.