



Math in Chinese Life

Lesson Plan by: Cheng-chih (Rhoda) Weston, Cincinnati Country Day School, NCTA 2021 (The Ohio State University seminar)

Title: Math in Chinese life

Theme/Topic: Interdisciplinary- math and language

Introduction:

In this lesson, students will learn Math vocabulary and how to describe shapes and colors in Chinese. By the end, students will understand Tangrams' history and use Chinese language patterns to present Tangram's solution.

Subject(s)/Grade level(s):

This project is intended for Novice-mid language classes, a first year high school foreign language class. After preparation, students from this group will share their lesson with primary grade students. This introduction of a Chinese game and thinking in math emphasizes math standards and connections and communities (Foreign Language).

Suggested Duration of Lesson:

6 hours

1 hour: History introduction

2 hours: Language practice

1 hour: Game and activities

1 hour: Create the story

1 hour: Share the story



Math in Chinese Life

Connection to Standards/Common Core:

Math:

Solve real world and mathematical problems and Reason with shapes and their attributes. ([3.MD.8](#) and [3. G. 1](#))

Language:

Interpersonal and presentational communication: Interact with others using culturally appropriate language and gestures on a wider range of familiar topics. ([Grade 6-8, 2b,c](#))

Essential Questions:

1. What is the history of Tangrams?
 2. What is the relationship between Chinese culture and Tangrams?
 3. How to apply tangrams in daily life?
-

Materials Needed:

Students: Tangrams, whiteboard, whiteboard markers,

Teachers: computer, PowerPoint

Lesson Activities/Instructional Strategies:

1. Introduce Tangram history
2. Introduce math vocabulary in Chinese
3. Practice with language patterns
4. Enhance the language with activities
5. Create the story or create a product relate to the tangram
6. Share their product to elementary students.



Math in Chinese Life

Resources:

Closing/Reflection Activity

Students will create their own story with tangrams. [Example](#)

Post-Assessment

Students will use what they learn (history, story, products, etc.) to share with elementary students.

[Example](#)

Extension Activities/Extending the Lesson/Cross-Curricular Connections:

1. [Table manners](#)
2. [Advance Chinese reading](#)

Links to examples:

- [“How tangrams work”](#) by Matt Sailor,
- [“Story of Tangrams”](#) by CCTV
- [”Trangrams table”](#) by , 2017
- [Tangrams furniture design](#) by Zen tao Hao, China 2017
- [‘All categories of tangram patterns’](#),
- [“Steam power family”](#), 2021

- [“Beijing Palace museum”](#)

- [“Historical Data”](#)

- [History of Tangrams”](#) by Aouteman e‘niang, 2019