# **STEAMS** Chinese New Year Project-Based Lesson Plan (6-8)

**Objective:** The objective of this lesson plan is to engage middle school students (grades 6-8) in an in-depth exploration of Chinese New Year, integrating Science, Technology, Engineering, Arts, Math, and Social Studies (STEAMS) concepts. Through this project, students will gain insights into the cultural significance, traditions, and celebrations of Chinese New Year.

## Key Components

Science (S): Lunar Calendar and Astronomy	<ul> <li>Topics:</li> <li>Understand the lunar calendar and its significance in determining the date of Chinese New Year.</li> <li>Explore the astronomy behind the lunar phases and their connection to Chinese New Year celebrations.</li> </ul>
Technology (T): Digital Research and Cultural Exploration	<ul> <li>Topics:</li> <li>Utilize technology tools for digital research on Chinese New Year traditions, customs, and history.</li> <li>Explore interactive online resources to learn about Chinese New Year celebrations around the world.</li> </ul>
Engineering (E): Designing Lunar New Year Decorations	<ul> <li>Topics:</li> <li>Engage in the engineering design process to create traditional Chinese New Year decorations.</li> <li>Discuss the cultural significance and symbolism of decorations such as red lanterns, paper cuts, and couplets.</li> </ul>
Arts (A): Chinese Calligraphy and Paper Cutting	<ul> <li>Topics:</li> <li>Learn about the art of Chinese calligraphy and its role in Chinese New Year celebrations.</li> <li>Practice basic Chinese calligraphy strokes and create New Year greetings or blessings.</li> </ul>

	<ul> <li>Explore the art of paper cutting and create traditional paper cut designs.</li> </ul>
Math (M): Lunar New Year Food and Budgeting	<ul> <li>Topics:</li> <li>Analyze the cost of Lunar New Year food and budgeting for a traditional celebration.</li> <li>Apply mathematical concepts such as addition, subtraction, and percentages to plan a Lunar New Year feast within a budget.</li> </ul>
Social Studies (SS): Cultural Traditions and Global Celebrations	<ul> <li>Topics:</li> <li>Explore the history, traditions, and cultural significance of Chinese New Year.</li> <li>Discuss how Chinese New Year is celebrated in different countries and cultures around the world.</li> </ul>

#### **Resource Needs**

1. Planning and Research:	<ul> <li>Materials:</li> <li>Technology:</li> <li>Experts/Community Resources:</li> </ul>
2. Science Component:	<ul> <li>Lab Equipment:</li> <li>Materials:</li> <li>Technology:</li> </ul>
3. Technology Integration:	<ul> <li>Devices:</li> <li>Software:</li> <li>Technical Support:</li> </ul>
4. Engineering Design and Prototyping:	<ul> <li>Materials:</li> <li>Tools:</li> <li>Technology:</li> </ul>
5. Arts and Design Elements:	<ul> <li>Art Supplies:</li> <li>Multimedia Tools:</li> <li>Technology:</li> </ul>
6. Mathematical Calculations:	<ul> <li>Calculators:</li> <li>Tools:</li> <li>Technology:</li> </ul>

7. Social Studies Connection:	<ul> <li>Reference Materials:</li> <li>Guest Speakers:</li> <li>Field Trip:</li> </ul>

### Assessment Criteria

Science:	Understanding of Chinese New Year traditions, customs, and cultural significance.
Technology:	Effective use of technology for digital research and exploration.
Engineering:	Effective designs that demonstrate utilization.
Arts:	Creativity and craftsmanship in designing Lunar New Year decorations and artwork.
Math:	Accuracy and application of mathematical concepts in budgeting for a Lunar New Year feast.
Social Studies:	Insightful contributions to discussions on cultural traditions and global celebrations.

## Presentation

Group Reflection Activity:	Students present their final projects, including decorations, artwork, budget plans, and research findings, to the class. This project encourages students to explore the interdisciplinary connections between science, technology, engineering, arts, mathematics, and social studies while gaining a deeper appreciation for Chinese New Year and its cultural significance.
----------------------------	---