

Promoting intangible cultural heritage for educators to reinforce education for sustainable development in the Asia-Pacific Region

Pilot country: Pakistan

Topic of the lesson: Periodic Table with *Tappas*

Grade: 8

Subject Teacher: Ms Sunita Khan **Subject:** Science / Chemistry

ICH Element Selected: Folk Music and Rhythm

ESD principle: Respect for collective memory and experience

Duration: 45 minutes

Objectives: To make learning of the Periodic Table enjoyable by integrating rhythm and folk music with the elements in the Periodic Table. To introduce traditional folk music to students. To get students actively participating in learning.

Method:

- Use traditional music and employ the rhythmic pattern of 5 beats (2+3) as aids to memorize the chemical elements in the Periodic Table.
- Explain that the characteristics of each element repeat after eight elements, by drawing the periodic table, and then link this to the repetition in the music.

Activities:

- 1. Divide the class into three groups. Using the music of a traditional folk song, each group will compose song lyrics based on:
 - The elements in the Periodic Table.
 - The names of the scientists who discovered them.
 - The properties of the chemical elements.
- 2. Each group will then sing their compositions, to the tune of folk songs such as:
 - Tappa
 - Kala Doria
 - Sufi Kafi of Bulhey Shah—Bulha Ki Jana Mein Kaun

Home assignment:

Collect riddles, idioms and proverbs from the elders in your family. Discuss the original lyrics of the songs with the elders and determine whether the lyrics still have relevance to modern-day life.