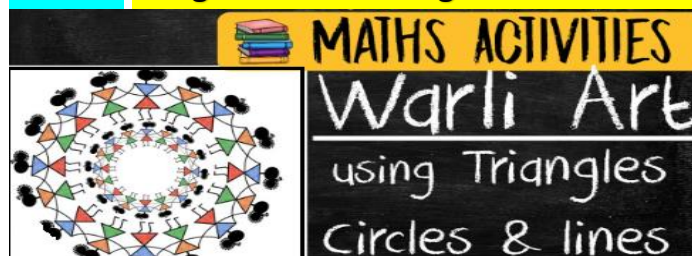


Satish Chandra Memorial School

Mathematics Art Integrated Activity

Std : IX 2026-27

Theme: Congruence of Triangles via Warli Art



Introduction

In Warli Art, triangles are the primary building blocks used to draw human bodies, animals, mountains, and trees

How Triangles Are Used in Warli Art:

- **Human Bodies:** A human figure is drawn using **two triangles** meeting at their tips.
- The **upper triangle** represents the torso or chest.
- The **lower triangle** represents the pelvis or hips

Nature Elements:

- Pointed triangles stacked or drawn side-by-side represent **mountains, hills, and trees**.

Symbolism of Gender:

- Men are often depicted with a larger upper triangle and a smaller lower triangle.
- Women are shown with a wider lower triangle (pelvis area) to signify fertility, often accompanied by a hair bun

Core Features of Warli Painting:

- **Basic Shapes:** Combined with circles (representing the sun and moon) and squares (representing sacred land or a chaukat), triangles complete the entire visual vocabulary of this tribal folk art.
- **Color Palette:** Traditionally painted with white rice paste on a red-ochre or dark mud background.
- **Style:** Two-dimensional and minimalist, showing community dances, harvests, and daily village life

Topic: Congruence of Triangles via Warli Art

Objective of the Activity:

To understand and demonstrate the concept of **congruent triangles** (triangles that have the exact same shape and size) through the traditional Warli tribal art form of Maharashtra

Mathematical Concept: Definition of congruent triangles and the criteria used (SSS/SAS).

Materials Needed:

- White or colored thick sheets (A3 or A4 size)
- Black marker pen or sketch pen
- Pencil, eraser, and ruler
- Pair of scissors and glue
- Geometrical instruments (compass)

Step-by-Step Activity Instructions:

- Cut the Base Triangle:** Draw a neat triangle on a separate piece of paper and cut it out with scissors. This serves as your master template
- Use your base triangle to trace multiple identical triangles onto your main sheet, ensuring they are strictly congruent. Cut them out or draw them directly.

Form Warli Human Bodies:

Connect the tip of an **inverted (upside-down) triangle** to the tip of an **upright triangle** to create the iconic torso of a Warli human figure.

Because these two touching triangles share equal side lengths and angles by design, you can mathematically prove they are congruent using criteria like **SSS (Side-Side-Side)** or **SAS (Side-Angle-Side)**.

Add Details:

Draw a small **circle** on top of the upper triangle to represent the head.

Use simple **straight line segments** for arms and legs in motion (dancing, hunting, or farming).

Compose the Scene:

Arrange your figures on an A3 sheet to depict a traditional village scene—such as a harvest dance or tribal celebration—surrounding them with geometric borders using lines, circles, and repeated triangles.

Observation Table:

Measure the sides and angles of the triangles used in your art piece to prove mathematically that they overlap and are fully congruent

Some Samples:

