



San Francisco Opera's Puccini's *THE GIRL OF THE GOLDEN WEST*

Curriculum Connections

California Content Standards
Kindergarten through Grade 12

MATHEMATICS

ATTRIBUTES

Comparisons in The Girl of the Golden West

Sorting and Classifying: What characters belong together, which don't, and why?

MEASUREMENT

Use of Standard Units of Measurement in Story & Set Design.

2D & 3D Dimensions: Area, Perimeter, Volume, Scale, Proportion, Ratio.

- Create a set for *The Girl of the Golden West* to scale.
- Design a menu with recipes (with measurements) for Polka Saloon.

Weight: Physical, Metaphorical, Balance.

- Calculate value of different measurements of gold, then vs. now.
- Why is gold valuable?

Time: Passage of time (real & theatrical time), times of day (morning, afternoon and night; yesterday, today, tomorrow; time of everyday events such as dinner & bed time), estimation, reading time, age of characters.

- Look at maps of Sierra Gold Country and surroundings; measure distances from the different locations mentioned in the opera, like Monterey and Sacramento.
- Trace the routes miners took to Gold Country, by sea and land. Measure how long the journeys would have taken by horse or by boat.
- Measure how long mail would take to get from miners to their homes. How did the postal service work?

GEOMETRY

As found The Girl of the Golden West's costume & set design.

Identification of Shapes, Repetition & Pattern, Rhythm & Symmetry.

Planes (Square, Rectangle, Triangle, Circle) & 3D (Cube, Pyramid, Sphere). Positive & Negative Space, Interior & Exterior Space.

NUMBER SENSE

What type of currency was used during the Gold Rush? What were average wages for miners? How did average miner support himself?

What kinds of skills were valued during the Gold Rush? How much would different professions make? Compared to today?

Calculate how much it cost for miners to reach Gold Country.

How much would mining tools have cost?

Calculate how much the boys needed to collect to send the homesick miner home.

What are rules and probabilities of baccarat game/poker game?

Research ransom amounts and calculate how much Ramerrez's ransom would be in today's dollars.

STATISTICS

Chart mortality rate/lifespan of gold miners.

Research statistics on how many miners actually made a living from mining.

ACTIVITIES

Research the history of Wells Fargo Bank.

Research the history of Levi Strauss & Company.

Write instructions on how to pan for gold, with a focus on measurements.

Research claim sites and calculate average area.

Create rules for your own card game.