



San Francisco Opera's Wagner's *DIE MEISTERSINGER VON NÜRNBERG* Curriculum Connections

California Content Standards
Kindergarten through Grade 12

MATHEMATICS

ATTRIBUTES

Comparisons in Die Meistersinger von Nürnberg

Sorting and Classifying: What belongs, what does not belong, 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 *Die Meistersinger von Nürnberg* to scale.

Weight: Physical, Metaphorical, Balance.

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.

What units of measure were used during the time of the opera?

What is a tick system? What is it based on? Where do you see it in the opera? How would they judge a competition? What would the rubric be? How would you evaluate someone on a competition? Rating system?

Measure distances between places mentioned in the opera. Use map scales to convert inches to miles.

Research Wagner's salary for *Die Meistersinger von Nürnberg*. How did it compare to other salaries of the day?

What currency was used during Wagner's day? How much was it worth compared to today's money?

Estimate how many people are in large ensemble scenes.

What units of measure were used during the Wagner's time?

Create timeline for Wagner's life, what's happening in other places at the same time.

Estimate how many people are in large ensemble scenes. Taking into account all the people on stage, how much would such a scene cost?

Count the number of people who need to be paid when putting on an opera; use cast and company listings in the program to calculate.

Create a budget for a production of the opera. Students are responsible for accomplishing production and staying within budget.

GEOMETRY

As found Die Meistersinger von Nürnberg's character, 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.

Build a scale model of a set for *Die Meistersinger von Nürnberg*. What materials and what quantities would you need to build the set?

Build a scale model of a stage for the singing competition that could accommodate all of the Meistersingers. Take proportions into account.

Create analogies between polygons and different ensembles in the opera (i.e. a trio is a triangle, a quintet is a pentagon).

What kinds of geometry would have been required to build a boat? Volume of boat, displacement, etc.?

NUMBER SENSE

Formulas & calculations: Addition, subtraction, multiplication, division.

More, less, or same as.

Concept of zero (absences, disappearances. Ex. rests/silence in music.

Ordering & sequencing.

Recognizing and creating numerical patterns. Ex. beats, ABA pattern in music.

Survey taking: tallying and graphing.

Predictions.

STATISTICS

What are the statistics for singers entering and competing for the title of Meistersinger?

ACTIVITIES

Create your own singing competition and come up with your own evaluating rubric.

Research remonetizing formula; how do economists determine how much money was worth then vs. now?

Build a scale model of a set for *Die Meistersinger von Nürnberg*. Specify your materials and estimate the quantities and costs of the materials that you will use to build your model.

Design and play a board game based on the opera.

Create costume patterns for *Die Meistersinger von Nürnberg*. Use yourself as a size model and design the patterns to fit you.