



San Francisco Opera's Charest's *THE TRIPLETS OF BELLEVILLE*

Curriculum Connections California Content Standards Kindergarten through Grade 12

MATHEMATICS

ATTRIBUTES

Comparisons in The Triplets of Belleville

Sorting and Classifying: What belongs, what does not belong, and why.

MEASUREMENT

The Triplets of Belleville's Use of Standard Units of Measurement in Story & Set Design.

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

- Create a set for *The Triplets of Belleville* 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.

Create timelines for the Triplet's life in Belleville, what's happening in other places at the same time.

Come up with measurements for Belleville; area and perimeter.

Come up with measurements for The Triplet's home; draw a floor plan.

Estimate how many people are in large crowd scenes.

Count the number of people who need to be paid when putting on a cine-concert; use cast and company listings in the program to calculate.

Create a budget for a production of the cine-concert. Students are responsible for accomplishing production and staying within budget.

Frames per second – A foot of film is equal to 16 frames. Most animation for film runs at 24 frames per second.

in order to create animation you have to do a lot of drawing and rendering. In the earlier days of Disney Feature Animation, it was not uncommon for the animators to produce 3.75 feet of animation per day. That comes out to about 14 seconds of animation a week.

Now much of animation is computer rendered. *The Triplets of Belleville* uses both hand drawn and computer rendered animation. Differences between hand-drawn animation and computer animation in time and money.

GEOMETRY

As found The Triplets of Belleville'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 *The Triplets of Belleville*. What materials and what quantities of them would you need to build it?

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

NUMBER SENSE

Counting using the production elements and music of The Triplets of Belleville.

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.

Calculate the daily milage in the Tour de France

Make up story problems based on one hundred.

Grandma rents the small boat for 1 franc, what was franc equivalent to euro when the euro was created? Estimate what it would cost today if the film were set in 1963, given inflation and the conversion to the euro. Then convert to a dollar.

STATISTICS

Experiment with different kinds of charts or use computer programs to explore different styles of data visualization based on information from *The Triplets of Belleville*.

ACTIVITIES

Design and play a board game based on the film.

Design a bicycle race and create a budget for promoting and running the competition.

How much money would it cost to build a theatre like the hall that the Triplets sing in? Build a scale model. Take proportions into account.

Build a scale model of the Tour de France. Specify your materials and estimate the quantities and costs of the materials that you will use to build your model.

Create costume patterns for *The Triplets of Belleville*. Use yourself as a size model and design the patterns to fit you.