TK–8 Math Connections

TK–2 | Foundations of Math Through Art

- Counting, sorting, and classifying shapes, colors, and symbols
- Spatial awareness: above/below, near/far, left/right
- Recognizing and creating simple patterns and repetitions
- Comparing size, length, and quantity using visual elements

Math in Action:
Students count symbols or ocean shapes and describe where elements are placed in their artwork.

Grades 3–5 | Visual Models & Measurement

- Geometry: identifying shapes, symmetry, and balance in compositions
- Measurement: estimating and comparing size, distance, and proportion
- Fractions: parts of a whole through image sections and layouts
- Data representation: organizing visual choices or symbols into charts or graphs

Math in Action:
Students plan layouts using sections, estimate spacing, and explain proportional choices in travel journals and portfolios.

Grades 6–8 | Proportion, Scale & Mathematical Reasoning

- Ratio and proportion in image scaling and composition
- Coordinate grids and spatial planning for layout design
- Geometry: angles, symmetry, and transformations
- Data analysis: interpreting patterns, trends, and visual information

Math in Action:
Students use scale, proportion, and spatial reasoning to design balanced compositions and justify choices using mathematical language.

Big Math Idea (TK–8):

Art provides a visual model for mathematical thinking—helping students make abstract math concepts concrete, meaningful, and connected to real-world contexts.