

EXPLORING GEOMETRY IN EVERYDAY LIFE



INTRODUCTION

Two third-grade teachers, Reneé Grogg and Jenny Ford, along with teaching artist Kitty Conde hypothesize that students who are first-time Illinois Standards Achievement Test (ISAT) takers can connect geometry to everyday life by using visual arts.

The team researches available resources. The best way to ensure students are prepared for these high-stakes tests is to begin with the Illinois Learning Standards. They clearly state what students are expected to know at a third-grade level. The teachers triangulate, make predictions and wonder, “What do students know about the main geometrical concepts?” and “Where can they find these concepts in the world around them?” The geometry unit contained within the *Everyday Math* textbook aligns the unit with standards and assures the team is on the right track. As a foundation for the visual arts component of the unit, they research and select two American artists who used geometry in their work. The teachers use the National Endowment for the Humanities’ “Picturing America” website and resource book to identify artists Frank Lloyd Wright’s *Fallingwater*, Kaufmann House, Mill Run, Pa., 1935-39, and Alexander Calder’s *Flamingo*, Chicago Federal Plaza, 1973. The team questions, “How can we contextualize the artists’ lives and works into the unit for greater understanding of geometry in everyday life?” Kitty facilitates hands-on learning in the classroom and develops art-making prompts that challenge and further support the students’ understanding of geometry.

NATIONAL LEARNING STANDARDS THAT ARE BEING MET INCLUDE:

Geometry

Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships

Visual Art

Understanding and applying media, techniques, and processes