

# **Me and M.C. Escher**

## *Chapter 9 Portfolio Project*

### *6<sup>th</sup> Grade Mathematics*

#### **Objective:**

One of geometry's beautiful and interesting applications is its use in artwork. Often the use of symmetry, congruence, and form are subtle parts of the overall composition. Some artists, however, rely on these concepts as the foundation of their pieces. One such artist is M.C. Escher. In this portfolio project, we will examine the geometric principles in Escher's work and compare and contrast them with original compositions.

#### **Procedure:**

- 1) During class we will look at two techniques that Escher commonly used in creating his artwork. We will look at how to create tessellations that have reflection, rotation, or rotation symmetry. We will also examine techniques for drawing three dimensional objects in a two dimensional space.
- 2) The student will then create 2 original designs.  
Design 1: This piece must be a tessellation that demonstrates either reflection, translation, or rotational symmetry.  
  
Design 2: This piece will be a still life that incorporates techniques for drawing three dimensional objects.

The rubric should be examined to ensure that the designs demonstrate the concepts, are accurate, neat, original, and use the coloring and shading techniques learned in Art class to their greatest advantage.

- 3) For each of the two designs, students will choose a piece of Escher's artwork that is similar in concept. Then the student will write a reflection paragraph comparing and contrasting their work and Escher's work (be sure to include a picture of Escher's work or a title for it). Some questions to consider in writing your reflection include:

Are the forms of symmetry the same or different?  
How are congruent and/or similar figures used in the object?  
What polygons are dominant in the drawing?  
What idea is the artist trying to convey?  
How are color and value used in the artwork?  
What was easy/difficult about creating this style of artwork?  
What do you like/dislike about this style of artwork?