## Tessellations and Origami: More than just pretty patterns and folds

## Shanna Rabon

## **Synopsis**

This unit is an exploration into the bridge between Math and Art. It explores the connections between these subjects through the study of tessellations, tilings, polyhedral models, and origami. In the unit, the activities consist of experimentation through various computer programs and websites with tessellation and polyhedra construction, analysis of construction using mathematical equations, printmaking artwork, and modular origami folding. Background information will help students learn about various symmetries of tessellations and polyhedra and how to create them. Another integral part of the unit, is an activity where the students will critique M.C. Escher's artwork based on a four step process: describe, analyze, interpret, and decide. Through group discussions and experimentation, students would then discover that Math is found in interesting pieces of art and they then would be excited to start their own art pieces and learn more about the connectivity between Math and Art.