

Architects (AR-kuh-tekts) use many shapes to design buildings. Rooms are often square shaped. Doors and windows are rectangles. Bricks and tiles are also many shapes. They can form patterns. Sometimes, patterns are made to decorate the **facade** (fuh-SAHD).



Architects often design buildings with sets of columns and arches. These can form patterns that decorate the building.

> create a continuous pattern around the building.

The arches in the Colosseum (ko-luh-SEE-uhm) in Rome

Architects also use windows to create patterns on buildings. Draw the table and answer the questions.

LET'S EXPLORE MATH

- **a.** What are the missing numbers in the table?
- **b.** What is the rule for the number pattern in the table?

Number of Windows on Each Story of the Building

Story	Windows
2	6
3	9
4	

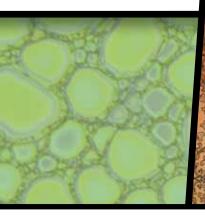
19



Artists have used patterns in paintings and other works of art for thousands of years. Patterns are often used to add interest to pictures. Some forms of art have patterns that have special meaning. Look at this ancient **Celtic** (KEL-tik) art. The spiral pattern stands for the sun. Some artists use patterns to

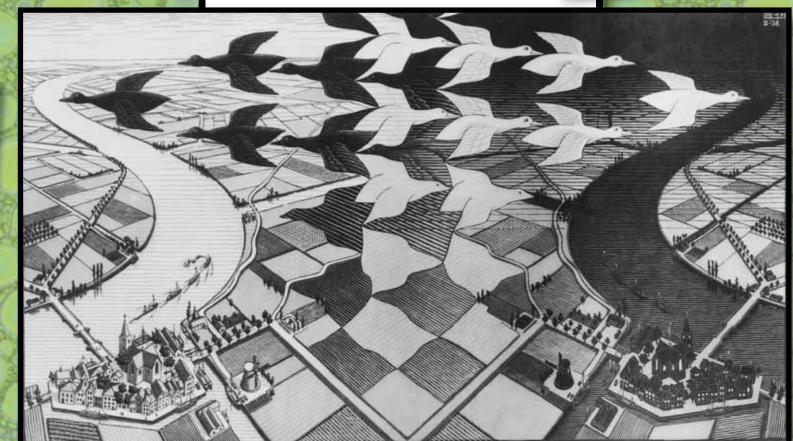
make artwork more interesting. In the picture below, the pattern on the field continues into the sky.





This Egyptian artwork has many different patterns forming the border that frames the picture.





M. C. Escher used pictures to create complex patterns that look **three-dimensional**.