EXPLORE WITH THE COLUMBUS MUSEUM

The Art and Math of Jazz

Gene Davis, *Night Rider*, 1981, 69" x 98.25", Collection of The Columbus Museum

For over 25 years, artist Gene Davis experimented with a single, linear element in his paintings – stripes! By varying the width, hue, and placement of these stripes he created hundreds of original arrangements like the large-scale painting seen here. *Night Rider* was completed in 1981 and is now in the permanent collection of The Columbus Museum.

The artist once commented that the negative spaces and colors found in his compositions directly relate to the "intervals and rhythms in music." Did you know that intervals are found not only in music, but also in art and math? Intervals measure or describe the difference between two things. In music, intervals refer to the difference in pitch, such as high or low, between two sounds. In art, color intervals are the measurement of difference between two colors; and in math, an interval is the set of numbers between two numbers on a number line.

Davis was specifically inspired by a type of music called jazz. Jazz is a genre of music that is based on improvisation, creative freedom, and collaboration. When you make or do something you have not planned, you are improvising or acting spontaneously! Jazz musicians often make up solos on the spot, this "call" is then answered by a "response" from other musicians in the ensemble. Jazz developed in the early 20th Century in African-American communities in New Orleans, New York, Chicago, and Kansas City, MO. To listen to jazz legend Miles Davis, click here!

EXPLORE WITH
THE COLUMBUS MUSEUM

The Art and Math of Jazz

(Continued)

Look closely at *Night Rider*. Select one of the colors and follow it across the painting. How does it move? Try clapping out the rhythm of the stripes with thick stripes representing slow notes and thin stripes representing fast ones. Once you have familiarized yourself with the work, it's your turn to create a work of art inspired by the artist Gene Davis.

Before you begin: Did you know that each note in a musical composition represents a fraction? 1 note equals 4 beats, ½ note equals 2 beats, ¼ note equals 1 beat, etc. A beat refers to how fast or slow a piece of music is played. In this exercise, you will use fractions to guide your composition. Be sure to carefully read through all the directions before you begin. You will need a pencil, a ruler, and three colored pencils, markers, or crayons.

Drawing Directions:

- Draw 1 rectangle. The rectangle must have a perimeter of 18in.
  How long is each side of your rectangle? _____
- Divide your rectangle into 40 equal parts along its length.
  What fraction of an inch does each segment represent? _____
- Using your first color, color 2/8 of your rectangle.
  How many segments did you color? (Write your answer in whole numbers.) _____
- Using your second color, color 1/5 of your rectangle.
  How many segments did you color? (Write your answer in whole numbers.) _____
- Using your third color, color 3/20 of your rectangle.
  How many segments did you color? (Write your answer in whole numbers.) _____
- Leave 2/5 of your rectangle white.
  How many segments did you leave white? (Write your answer in whole numbers.) _____
- Continue creating your artwork, alternating colors to create different sizes of stripes.

EXPLORE WITH
THE COLUMBUS MUSEUM

The Art and Math of Jazz

(Continued)