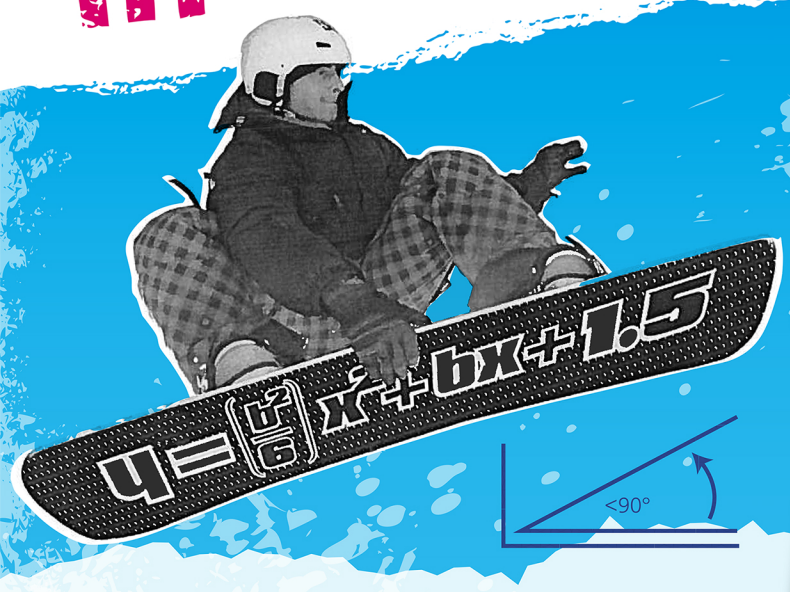
What do sports, nature and music have in common?

Math

MATH AND SCIENCE SHAPE THE WORLD ALL AROUND US.

in Sports



Math and science principles are at work with every swing of the bat, shot on goal, dive off the board and half-pipe descent.

PRECISION is key when snowboarders work to hit the best angle and finish first down the slope. The straighter your path down the slope, the faster your speed. Swerving to avoid obstacles slows you down. Too wide and you lose speed. Too tight and you risk wiping out. The angle of your turn will likely be less than 90° — an ACUTE angle.

in Music

Rhythm is repeated patterns created by the length of the notes and time between them. Rhythm is what makes music flow and move. Notes are grouped into equal periods of time called measures.

EACH DIFFERENT TYPE OF NOTE IS A FRACTION OF THE WHOLE MEASURE.

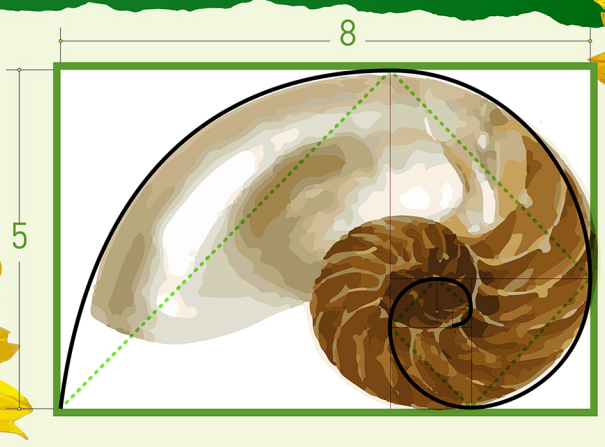
In a measure with four beats you might hear:

8 *Eighth Notes*

½ beat each

in Nature

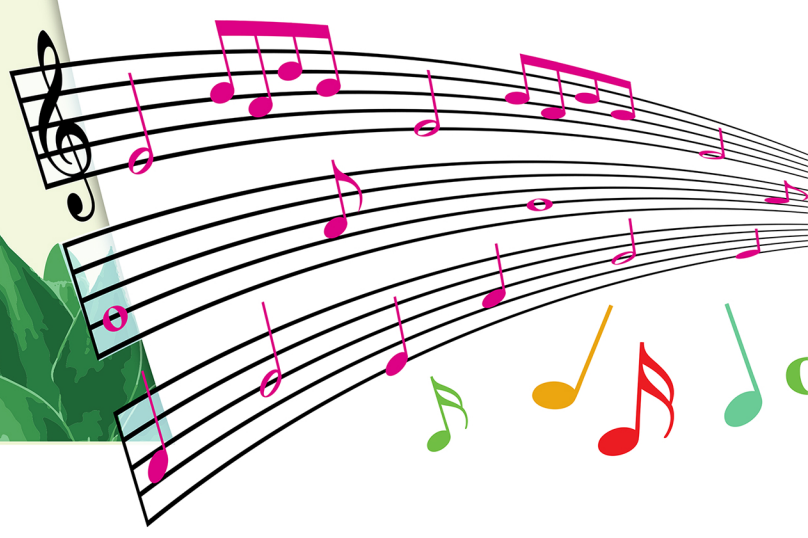
THE FIBONACCI SERIES helps us understand **RATIOS** and **PROPORTIONS** and to use **GEOMETRIC MODELS** to analyze the natural world.



This series is a sequence of numbers commonly found in nature – from the growth pattern of leaves on a tree to the chambers of a nautilus shell to the formations of clouds.

By understanding the value of the fractions that make up each note, one can understand the construction of a song and ensure the music stays in time.

Understanding mathematical aspects such as fractions and percentages is the only way to create a *rhythm, harmony, and tempo* that come together to form a perfect song.



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is designed to *inspire,* to *spark the imagination,* to reveal not only math at work, but the

Endless Possibilities Of Math

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