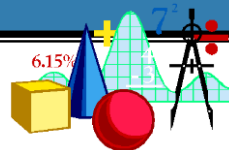


## Mathematics, Grade 7

### Unit VIII: Lesson 1

### Demonstration: Music by Pythagoras



Pythagoras is best remembered for his work with triangles, but equally important was his work with the mathematics of music. Research Pythagoras and the theory of music.

Construct a stringed instrument by stretching a string between two fixed points so that it will emit a sound when plucked. You must be able to tighten the string to make the instrument work. Using proportional lengths of that string will enable you to sound all the notes in an octave. You may also use glasses filled with water to the proportional level to produce the notes in an octave.

Explain Pythagoras's theory of the mathematics of music to the class. Demonstrate your instrument by playing all the notes in an octave.

***Extension:*** *Compose a simple song and play it on your instrument, accompanied by someone playing the glasses.*