



## The Parallels Between The Elements Of Music And Art **The Art of Musical Play: A Summer Workshop**

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Workshop Notes

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- There are parallels between the elements of music and the elements of art. Artists and musicians use their bodies as well as their minds.
- Active participation in art and music develops strong brain/body connections.
- The fundamental elements of visual perception include colour, (hue, saturation and lightness), brightness, location, texture, and shape. Artistic expression involves creating a relationship between a set of lines/contours/ shapes, colours, texture, rhythmic patterns, flow and form. When these elements are combined harmoniously, they give a sense of perspective, foreground, background, emotion, energy and other aesthetic qualities.
- The elements of music are: rhythm, melody, texture, timbre (colour), harmony, dynamics (loud/soft), and form.
- Sound waves do not have pitch. Their motion and oscillations can be measured, but it takes the human or animal brain to map them to that internal quality we call pitch. Pitch is related to the frequency or rate of vibration of a string, column of air or other physical source.
- Like these sound waves, we perceive colour in similar ways. Isaac Newton discovered that light is colourless. Colour has to occur within our brains. Colours only occur when they interact with our eyes.
- Sound waves intrude on the eardrums and pinnae (the fleshy part of our ear), setting off a chain of mechanical and neurochemical events, the end product of which is an internal mental image we call pitch.
- The unit of measurement, cycles (of sound waves movement) per second are called Hertz. The range of human hearing is generally 20 Hertz to 20,000 Hz. The sound of the average male speaking voice is around 110 Hz, the average female speaking voice is around 220 Hz.
- The note names in Western music run from A to G. Because pitch comes from a continuum – the vibration frequencies of molecules, there are



technically an infinite number of pitches. A fundamental quality of music is that note names repeat because of a perceptual phenomenon that corresponds to the doubling and halving of frequencies. When we double or halve a frequency, we end up with a note that sounds similar to the note we started out with. This relationship is called the octave: A B C D E F G A.

- Every culture we know of has the octave as the basis for its music. C D E F G A B C. In the C major scale a perfect fourth is C-F. The intervals of the perfect fourth and perfect fifth: C-G are so called because they sound pleasing to most people, and since the ancient Greeks, this particular feature of the scale is at the heart of all music. Pitch is one of the most primary means by which musical emotion is conveyed. A single high note can convey excitement. A single low note can convey sadness.
- The notion of circularity in pitch perception is similar to circularity in colours. The octave of tones going up in frequency C D E F G A B C has a parallel with the colour spectrum: red, orange, yellow, green, blue, indigo, violet and back to red.
- We can help children visualize and draw where pitches are, feel the energy and rhythmic flow of music through use of art techniques, drawing/painting to music, illustrating the patterns we hear, creating visual patterns to match the rhythmic patterns, drawing the melodic contours, using different colours to interpret the energy or mood of the music, using the colour spectrum for the scale patterns. Rhythm stirs our bodies, tonality/pitch and melody stir our brains.
- Nature can inspire our artistic expression. Our artistic creations can then become illustrated music scores. We can dance or interpret these musical scores in a variety of ways. Music breathes. It speeds up or slows down just as the real world does.
- Through participation in artistic creative experiences, we are inspired to take time to appreciate, watch, wait, look, listen, interpret, and create in ways that uplift and help us to learn and express our feelings about all the wonders and beauty of the world around us.

**Reference:**

Levitin, D.J. 2006, p. 15-30 *This is Your Brain on Music*. U.S.A . Dutton