Quantum Science for Energy Healers: A Practical Guide

Workbook Answers: Week 2

Topic G: Review of Week 1:

G:1 key concepts learned in week 1.

a) all matter—both living and "non-Living"-- is composed of atoms.

b) atoms have a dense, positive core containing protons and neutrons with negatively charged electrons located outside the nucleus.

c) electrons can be removed and/or added to neutral atoms (elements) to form chemical bonds. These charged species are called ions and the bond is ionic.

d) atoms may also share electrons to form covalent bonds…these substances are typically insulators i.e. do not conduct electricity.

e) Moving electrons generate an electrical and a magnetic field. Magnetic fields are thought to be the result of electrons in alignment and they in turn can induce electrical currents

f) visible light is part of the electromagnetic spectrum—which ranges from radio waves to gamma—all light is quantized or packaged i.e. it has a specific amount of energy which is directly related to its frequency and wavelength.

g) the Rutherford-Bohr model of the atom was the first to show that the energy holding the electrons around the nucleus was also quantized

Topic H: What is causality and how is it related to the scientific method?

H:1. Key Words:

Linear sequence: items or events occur in a straight line

Causality: the relationship between an event (the cause) and a second event (the effect), where the second event is a consequence of the first

scientific method: a method of inquiry based on gathering observable, empirical and measurable evidence subject to specific principles of reasoning

H:2. Questions to ponder

H:2.1 Srengths of scientific methodology include its intended objectivity, the use of logic to either affirm or falsify the hypothesis, it's inherent rigor in that the results of all experiments should be reproducible

H:2.2. Limitations of scientific methodology include the limitations or framework of the experimental design itself, the challenge of being truly objective as the experimenter's perceptions affect what he/she is observing and the choice of what data and statistical analysis to include or exclude is open to human bias. is a change of an electron from one quantum state to another within an atom.[1] It appears to be discontinuous; the electron "jumps" from one energy level to another very quickly

Topic I: What is holism?

I:1. Key words:

Empty circle: Buddhist model of holism wherein the circle has a dual nature in that it simultaneously represents everything and nothing

holism, the idea that all the properties of a given system (physical, biological, chemical, social, economic, mental, linguistic, etc.) cannot be determined or explained by its component parts alone.

Paradigm: a philosophical or theoretical framework

quantum leaping: is a change of an electron from one quantum state to another within an atom, the electron "jumps" from one energy level to another almost instantly

I:2. Questions to Ponder

I:2.1. The "empty circle" in Buddhist philosophy is a representation of the Buddhist view of the universe. They perceive the universe as an infinite number of instants existing simultaneously through space and time, and, it is this interdependence of these instants which make up the whole. It is everything and nothing.

I:2.2. The implications of "quantum leaping" for energy healers is that if the universe is totally quantized and that all information and events etc., are in existence simultaneously then it is possible to access past, present and future events, and access information on other frequency (quantum levels) and move energetically from 1 place to another as in remote healing

Topic J: What is the quantum model of the atom?

J:1. Key words:

Probability distribution: the range of values that an electron may have and the likelihood that it is located within that range.

"wavicle" the concept that all matter exhibits both wave and particle properties

uncertainty,: state of having limited knowledge where it is impossible to exactly describe an existing state or future outcome.

J:2. Questions to Ponder

J:2.1. The dual nature of light or "wavicle" idea is the concept that all matter exhibits both wave and particle properties. This can be applied to energy healing in that energy from our hands, our therapeutic presence and physical presence etc are capable of directing/sending streams of particles and or streams of energy depending on our intentions.

J:2.2. Probability distributions and uncertainty imply that all matter, including the human body, is mostly empty space filled with electromagnetic fields and that the location of the electron is only probable.

J:2.3. The quantum model of the atom shifts our understanding of how matter is constructed in matter is not solid and when we apply techniques such as etheric fingers, magnetic passes "hands still" (or energy sandwich), or laser we are able to direct penetrating energy through bone and tissue as our energy fields extend far beyond our body and can interpenetrate with the energy fields (which make up the "body" of the client.

J:2.4. The significance of Einstein's famous equation $E=mc^2$ with respect to energy healing lies in its implication that matter and energy are different forms of the same thing. Therefore, it gives support to our abilities as energy healers to use intention to direct various forms of energy which induce changes in the energy field and physical nature of the client. More importantly, because of its connection with Planck's work it becomes apparent that we are actually highly structured, quantized electromagnetic energy.

Topic K: What is sound?

K:1. Key words:

Sound: a pressure wave transmitted through a medium such as air, water or solids

resonance is the tendency of a system (such as a guitar string or tuning fork) to oscillate with larger amplitude at some frequencies than at others

vibration: mechanical movement (or oscillations) about a balance point,

amplitude: is the amount of change in a wave this is usually the changes in height of the wave as the pressure increases or decreases

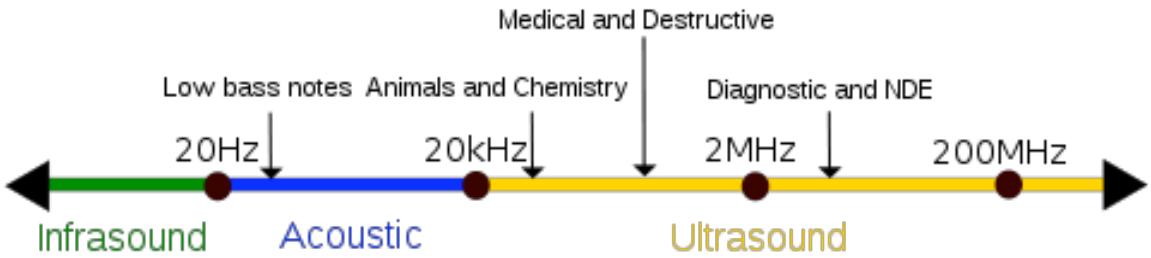
harmonics: of a wave is a component frequency of the signal that is an integer multiple of the fundamental frequency, i.e. if the fundamental frequency is f, the harmonics have frequencies 2f, 3f, 4f, . . . etc..

overtones: most oscillators, from a guitar string to a hydrogen atom or a star will naturally vibrate at a series of distinct frequencies known as normal modes. The lowest normal mode frequency is known as the fundamental frequency, while the higher frequencies are called overtones. Often, when an oscillator is excited by e.g. plucking a guitar string, it will oscillate at several of its modal frequencies at the same time. So when a note is played, this gives the sensation of hearing other frequencies (overtones) above the lowest frequency (the fundamental).

K:2. Questions to Ponder:

K:2.2. Mechanical vibrations that can be interpreted as sound are able to travel through all forms of matter: gases, liquids, solids, and plasmas. The matter that supports the sound is called the medium. Sound cannot travel through a vacuum. Sound is transmitted by longitudinal waves, also called compression waves..

K:2.3 Outline how vibration and sound are inter-related? Matter in the medium which is carrying the sound is periodically displaced by a sound wave, and thus the particles of which it is composed oscillate or vibrate.



Topic L: How do sound and light interact?

L:1. Key words

Cymatics, the periodic effects that sound and vibration has on matter.

ultrasound: cyclic sound pressure with a frequency greater than the upper limit of human hearing. approximately 20 kilohertz (20,000 hertz) in healthy, young adults

oscillating: repetitive variation, typically in time, of some measure about a central point between two or more different states. Familiar examples include a swinging pendulum and AC power. The term vibration is sometimes used more narrowly to mean a mechanical oscillation but sometimes is used to be synonymous with "oscillation." Oscillations occur not only in physical systems but also in biological systems and in human society

L:2. Questions to ponder:

L2.1 Sound energy may bring form and, consequently healing, to humans and other living organisms in the its compression waves of energy act on the particles which make up the medium it is travelling through and cause them to vibrate as they absorb the energy from the sound wave. This vibrational energy can then be transformed to other types of energy as required by the body. They also push on the electromagnetic waves of energy causing the to hold their form.