Individual Homework Assignment #1

Due 8 September.

The philosophers of many ancient cultures attempted to depict things in the physical world in terms of archetypal "elements" of which they were composed. These elements might be be thought of as the predecessors or precursors of today's <u>chemical elements</u> (Hydrogen, Helium, Lithium,, Uranium, *etc.*) However, the "classical elements" can probably be better considered as characteristics rather than as physical entities.

The Greek Classical Elements were Earth, Water, Air, Fire, and Æther. Some of these would seem to correspond to what we would today call <u>phases</u> of matter. For example, Earth = Solid, Water = Liquid, Air = Gaseous.

I'd like you (individually) to address three questions:

(1) What were the "Classical Elements" in some other cultures? (Give examples: Were they analogous to phases as well?)

(2) To what phase of matter might "Fire" refer? Explain.

(3) What about the fifth element ("quintessence"), the Æther (or Ether)? (In what respects was this stuff special?)

Please provide your conclusions in the form of a brief (a page or two) written response.

(A good starting point for this exercise might be to Google something like "Classical Elements" which will probably direct you to Wikipedia and other sources.)

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