

What You Should Know

- 1.) What are the three temperature scales?
- 2.) For the three temperature scales, at what temperature does water freeze and boil?
- 3.) What is an electron-volt (eV for short), and how is it defined? What is a KeV?
- 4.) What is a keV? a MeV? a GeV? a TeV?
- 5.) How is energy related to temperature (in general)? How is energy in eV's related to temperature in degrees Kelvin?
- 6.) A single particle of air at room temperature has how much energy in eVs?
- 7.) The binding energy of carbon is approximately what? If air particles had that amount of energy, what would the room be doing?
- 8.) What is the particle energy at the core of the sun?
- 9.) That is an "event horizon?"
- 10.) It possible for SPACE to expand faster than the speed of light. What is that process called?

11.) As best we know, how many times has inflation occurred since the Big Bang?

12.) The first time inflation happened in our universe, it allowed the universe to do something important. What was it?

13.) Is our universe currently expanding fast or slowly? What is the explanation for what is happening (a word or two will do).

14.) If trends continue, what will we be able to see in the night sky a few billion years from now (assuming humanity can see anything)?