Academic Earth Science

September 21, Thursday: B Day

* You will need your agenda and attached notes from last class

**WARM-UPS:**

1. **Review ExC-ELL vocabulary activity: Electromagnetic & Visible Light Spectra**
2. **Check the HW worksheet**

**OBJECTIVES:**

1. Complete the notes on the Electromagnetic and Visible Light Spectra
	1. **Partner Reading – take your notes.** Choose a partner (can be group of 3 IF we have an odd number of students)
	2. **Alternate reading the notes:** Each student reads a sentence – followed by your partner on the next sentence
		1. **Summarize the notes you just read**

**HOMEWORK:**

1. COMPLETE the electromagnetic spectrum worksheet
2. Re-read your notes on the 3 types of visible light spectra
	1. Be sure you answered the questions!
3. Read the attached information on the Big Bang Theory (astronomy, NOT TV!)

Electromagnetic Spectrum

1. Electromagnetic Spectrum:
	1. All forms of Radiant Energy
	2. Emissions (energy) from Stars in the form of WAVES
	3. Produced by Fusion (thermonuclear reaction: Hydrogen is fused to form Helium in the core of stars)
	4. Each Wavelength (λ = lambda) is a different type of radiant Energy
	5. WAVES:



 Radio Waves **longest λ**

 Microwaves

 Infra Red

 Red **longest λ (visible light)**

 Orange

 Visible Light Yellow

 Green

 Blue

 Violet **shortest λ (visible light)**

 Ultra Violet

 X-rays

 Gamma rays **shortest λ**

1. **Hot bodies (stars)** emit mostly shorter wave radiations (UV, X-ray, Visible light)
2. **Cool bodies (planets)** emit mostly long wave radiation (IR = ‘heat’ wave)

