Warm up 11.04.14

- **Sit where you wish**
- **Please take out your notebook and review the story and the notes you took about the videos**

Goals for today:

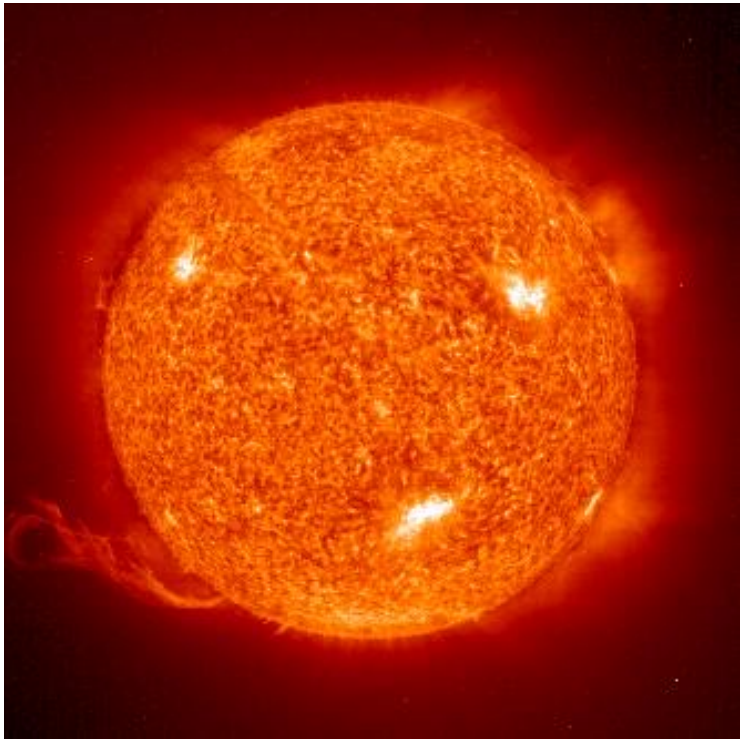
- ✓ **Announcements**
- ✓ **WYK110414**
- ✓ **The Sun: a star**
- ✓ **Internet Activity**

8th Anchor Questions Week 10 (Nov. 4-8)
Due: Anchor Questions as assigned daily, complete by Friday, 11.07 Assessment: Friday, 11.07

1. **Explain how our solar system formed (Nebular Theory)**
2. **Explain what a star is**
3. **How do stars, like the sun produce energy?**
4. **What is the "life-cycle" of a sun-sized star?**
5. **What is the "life-cycle" of a massive star?**
6. **List three layers of the Sun's Interior**
7. **What is in the "solar wind"?**
8. **List three solar effects and their effects on Earth**
9. **Describe what the "11 year cycle" is for the sun**
10. **What are sunspots and why are they important**
11. **Describe what causes the "Northern Lights"**

C-notes

Sun: What is it?



It is a star- it produces its own light

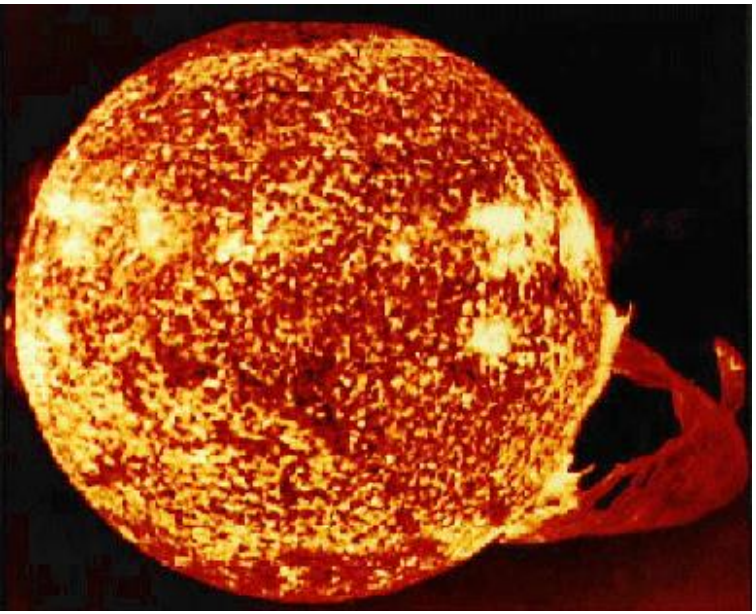
Age: 4.6 Billion years old

WILL “stop” shining in another 4 billion years

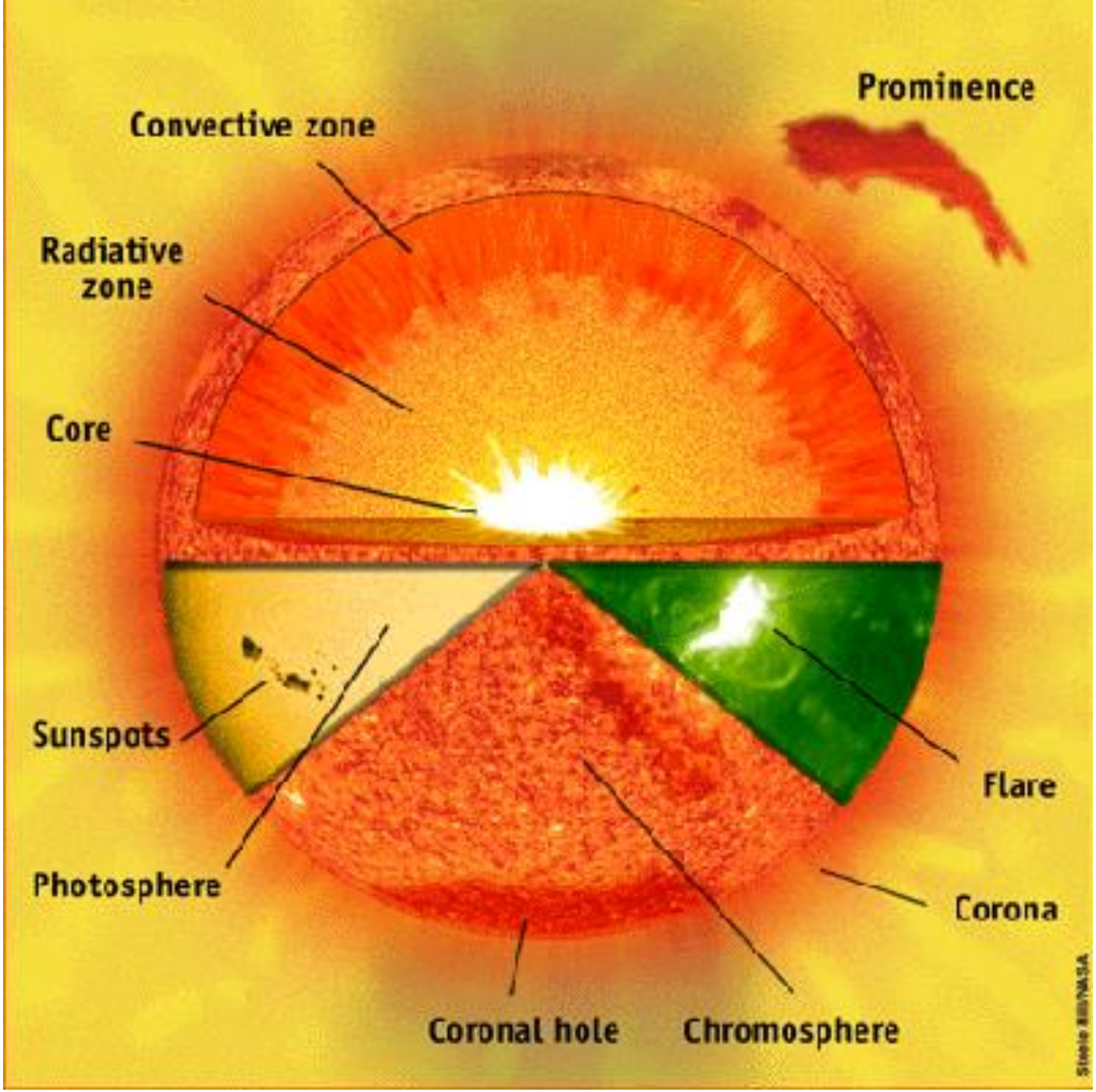
Provides ENERGY for all living things on Earth

C-notes

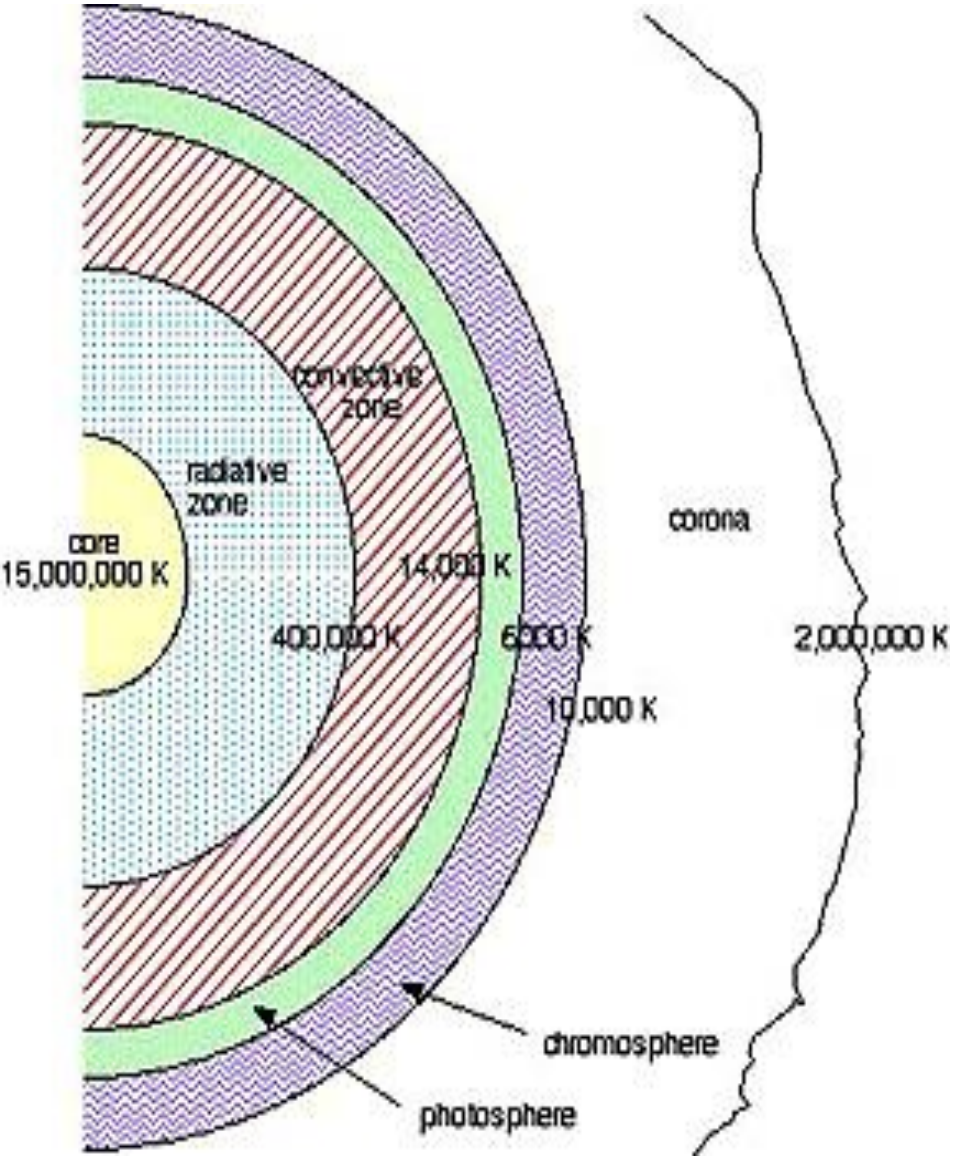
Sun: Energy



Sun “makes” it’s energy
The process that the sun uses to produce energy is called NUCLEAR FUSION (NF)
NF- takes two H atoms and smashes them together to make a He atom
That smashing releases ENERGY


Prominence
Convective zone
Radiative zone
Core
Sunspots
Photosphere
Flare
Corona
Coronal hole
Chromosphere

The sun’ s Layers



Sun’s Interior

Core
Radiative zone
Convection Zone
Photosphere

Sun’s Atmosphere

Chromosphere
Corona

C-notes

Layers of Sun's Interior: Explained

Sun Interior

Core- hottest, deepest layer. This is where NUCLEAR FUSION happens

Radiative Zone- this is the first layer where radiation exits the core. Usually involves electrons, protons and photons (light)

Convection Zone- is where "matter" rises and falls due to convection

Photosphere- this is the "surface" of the sun. Light escapes from here

C-notes

Layers of Sun's Atmosphere: Explained

Atmosphere
Chromosphere- thin layer colored red. Barely visible at sunrise or sunset
Corona- very hot, extends into space. You can only see during total eclipse