**Chapter 12 – The Sun, Our Star**

KUDO’s (Know, Understand and Do!)

**Section 12.1 - Size and Structure**

**Know:** Photosphere, Radiative zone, Convention Zone, Granulation, Chromosphere, Spicules, Corona, Corona Holes

**Understand:**

* The different components of the Sun
* How energy flows in the Sun

**Be able to DO:**

* Able use angular quantities to determine the Sun’s diameter

**Assignments:**

1. Read pages 311-316

2. Guided Notes & PPT

3. Vocabulary from Know

4. Whiteboard questions: **QFR:** 1-9; **TQ:** 1 **Problems:** 1-4

**Section 12.2 How the Sun Works & 12.3 Probing The Sun’s Core**

**Know:**  Hydrostatic Equilibrium, Pressure, Ideal Gas Law, Nuclear Fusion, Nuclear force(Strong Force), Proton-Proton Chain, Neutrino

**Understand:**

* The internal balance of the Sun
* The proton-proton chain

**Be able to DO:**

* Discuss how solar energy is generated

**Assignments:**

1. Read pages 316-320

2. Guided Notes & PPT

3. Vocabulary to know

4. Whiteboard questions: **QFR:** 10-12 **TQ:** 2-6 **Problems:** EC 7 & 8

**Section 12.4 Solar Magnetic Activity**

**Know:** Sunspots, Prominences, Solar Flares, Zeeman Effects, Solar Wind

**Understand:**

* The mechanisms of sunspot
* How prominences and solar flares form

**Be able to DO:**

* Discuss the Zeeman Effect

**Assignments:**

1. Read pages 323-328

2. PPT & guided notes

3. Whiteboard questions: **QFR:**  13-17 **TQ**: 9

**Section 12.5 The Solar Cycle**

**Know:** Solar Cycle, Maunder Minimum

**Understand:**

* Cause of the Solar Cycle
* Changes in The Solar Cycle

**Be able to DO:**

* Discuss the link between solar cycle and terrestrial climate

**Assignments:**

1. Read pages 328-332

2. Guided Notes & PPT

3. Whiteboard questions: **QFR:** 18-20