**Unit 3 – Telescopes**

**Chapter 5 – Telescopes**

KUDO’s (Know, Understand and Do!)

**Section 5.1 Telescopes**

**Know:** Light-Gathering Power, Refractors, Refraction, Reflectors, Dispersion

**Understand:**

* Light Gathering Power
* Difference between reflecting and refracting telescopes
* Advantage and disadvantages of the different types of telescopes
* Refraction as it relates to telescopes

**Be able to DO:**

* Distinguish between the telescopes .

**Assignments:**

1. Read pages 125-131

2. Guided Notes & PPT

3. Vocabulary from Know

4. Whiteboard questions: **QFR:** 1-2; **TQ:** 1-3 **Problems:** 1

**Section 5.2 Resolving Power**

**Know:**  Resolving Power, Diffraction, and Interferometer

**Understand:**

* Resolution of a telescope
* The purpose of an interferometer

**Be able to DO:**

* Calculate Newton Second Law Problems
* Calculate Universal Law of Gravitation Problems

**Assignments:**

1. Read pages 76-79

2. Guided Notes & PPT

3. Vocabulary to know

4. Whiteboard questions: **QFR:** 3-5 **TQ:** 4 **Problems:** 2-3, **EC** 5

**Section 5.3** **Detecting Light**

**Know:** CCD

**Understand:**

* Reason for CCD

**Be able to DO:**

* Explain the CCD

**Assignments:**

1. Read pages 134-136

2. PPT & guided notes

3. Whiteboard questions: **QFR:** 6 **Problems: EC** – 6 & 7

**Section 5.4 Telescopes on the ground and in space & Section 5.5 Observatories**

**Know:** Atmospheric Window, Scintillation, And Adaptive Optics

**Understand:**

* Why some telescopes are on the ground and some are in space
* When adaptive optics are used
* Gamma Burst

**Be able to DO:**

* Discuss the advantages and disadvantages of the ground and space telescopes.

**Assignments:**

1. Read pages 137-145

2. Guided Notes & PPT

3. Whiteboard questions: **QFR:** 8-10 **TQ:** 7-8 **Problems:**  EC 8