**Earth Science 2013-2014 Unit Planner**

**Unit 10: Sun, Earth, Moon System – TWIST**

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| Concept # | What we are learning | Mandatory Work | Optional Practice | Due Date | Chap. & Section  Ch:Sec | Standard |
| 1 | History of Astronomy | 1. History of Astronomy notes (142) 2. History of Astronomy reflections (143) 3. **History of Astronomy timeline** 4. Concept 1 Quiz | Concept 1 Video  IT: 348-350 | 3/17  3/17  3/24  3/20 | 18:1 | 12a1 |
| 2 | Measuring Time | 1. Measuring Time activity (144) 2. Indoor astronomy activity (145) 3. Concept 2 Quiz | Concept 2 Video  IT: 347 & 401 | 3/18  3/18  3/20 | 20:4 | 10a |
| 3 | Seasons | 1. Seasons Change activity/lab (146-149) 2. Concept 3 Quiz | Concept 3 Video  IT: 325-236 | 3/24  3/25 | pg 320 | 10b |
| 4 | Moon Phases | 1. It’s a Phase activity/lab (150-151) 2. Concept 4 Quiz | Concept 4 Video  IT: 423 | 3/25  3/26 | 21:4 | 10c |
| 5 | Eclipses | 1. Figuring Out Eclipses activity/lab (152-153) 2. Concept 5 Quiz | Concept 5 Video  IT: 423-425 | 3/26  3/27 | 21:4 | 10d |
| Project Time | All | 1. Day 1 2. Day 2 3. Day 3 |  | 3/27  3/28  3/31 |  |  |
| All | Test | 1. Unit 10 Assessment |  | 4/1 |  | 12a1, 10a, 10b, 10c, 10d |

**Standards:**

10. - explain the effects of the relative position of the sun, Earth and moon (GPS, ITBS)

10a. - explain how Earth’s movement in space produces the day/night cycle

10b. - relate the tilt of Earth to the distribution of sunlight throughout the year and its effect on climate (seasons) (GPS)

10c. - demonstrate the phases of the moon by showing the alignment of the earth, moon and sun (GPS)

10d. - explain the alignment of the earth, moon and sun during solar and lunar eclipses (GPS)

12a1. - describe how Ptolemy, Copernicus, Kepler and Galileo contributed to the knowledge of our solar system