“INFERENCES IN ASTRONOMY” PROJECT

INTRODUCTION Ever wonder how astronomers can claim to know what they know? Centuries of one scientist studying the work of another, observing, inferring, hypothesizing and testing has led to many new theories, and quite a few discoveries!

YOUR PROJECT is … WHAT? In a group of 2 or 3, or on your own, you must use all 5 senses to teach the class ALL about one theory in astronomy and how inference played or still plays a major role in its development &/or discovery.

HOW? FIRST - Research your theory (see choices on back) in your class textbook, on the Internet &/or in the library. Make notes about what it is believed to look like, how it behaves, what vocabulary and concepts you need to know to understand it, who studied/studies it, and anything else about it you find interesting.

SECOND - Create 5 ways to help the class learn & memorize the information you present about the 1 theory related to astronomy you choose to become an expert in. Include options from at least 3 of these categories:
   → VISUAL - diagram, data sheet, graph, photo, 3-D model, map, Powerpoint, video, skit, newspaper
   → AUDITORY - short lecture, oral quiz, anagram, rhyme, song, radio play, podcast
   → TACTILE - experiment, demonstration model, jigsaw, texture samples, building activity, game
   → TASTE - doesn’t have to be food, but can’t be dangerous!
   → SMELL - same as above
Note: You may beg, borrow (not steal) or invent the materials you need. If you’re stuck, ask “Kumu” for help!

WHEN? This project must be presented to the class on: __________

POINTS
• presentation has a clear focus & 20-40 accurate facts _____ points
• 3 or more senses are used to teach science info to class _____ points
• info & sources from class text & own research is used _____ points
• all in group present clearly, audibly & stay focused _____ points
• all in group do self-evaluation of project & team _____ points
TOTAL POSSIBLE:_____ POINTS
Example: Presentation & Grade for Astronomy Inferences Project

Both examples below would receive a passing score, but can you see why the project on the left earns a higher grade than the one on the right?

“A” Presentation on Earth’s Layers
✓ Topic is clear & focused
✓ Earth’s layers shown in labeled photos &/or diagrams & explained
✓ Seismology & mass demos show how inferences led to current beliefs
✓ Earth’s layers lab directs groups to create models with foods
✓ “Layers of the Earth” rap* played online & lyrics reviewed
✓ Earth’s layers Jeopardy played for prize with 40+ facts tested

“C” Presentation on Earth’s Layers
✓ Topic is clear & focused
✓ Textbook diagram of Earth’s layers shown & explained
✓ Earth’s layers inferences info given in anagrams to memorize
✓ Materials simulating those found at each Earth layer passed around to touch
✓ Earth’s core quiz given on 20 facts presented

Topics to Choose From

- Polynesian Constellations
- Earth’s Solar Year
- Our Solar System
- Round Earth
- Magnetic Poles
- Age of Our Moon
- Lifespan of Our Sun
- History of Mars
- Geology of Venus
- Position of the Milky Way
- Size of the Universe
- Big Bang Theory
- Parallel Universes
- Black Holes
- Worm Holes
- Other??
* Play "Layers of the Earth" rap at: www.educationalrap.com/59/layers-of-the-earth.htm