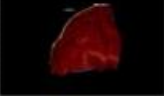



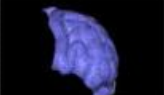
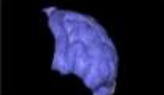
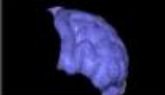




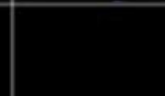
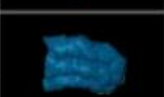
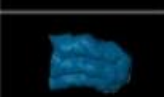
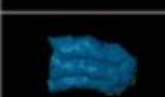





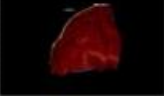



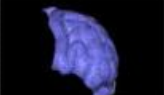
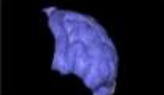
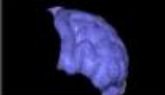




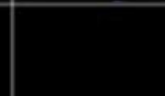
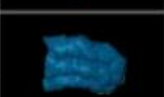
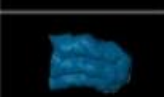
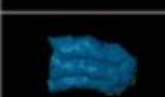





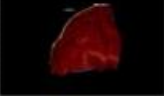



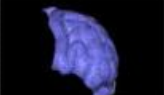
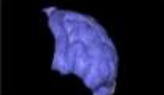
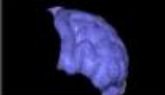




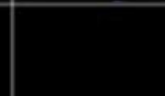
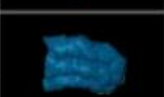
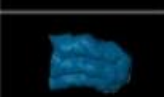
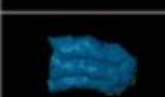







M16 Game Day

Friday, July 16, 2010
7:20 AM

Slides	Notes																														
<table border="1"><thead><tr><th></th><th>Nuclear</th><th>Stars</th><th>Galaxies</th><th>Extra</th></tr></thead><tbody><tr><th>parietal lobe</th><td></td><td></td><td></td><td></td></tr><tr><th>frontal lobe</th><td></td><td></td><td></td><td></td></tr><tr><th>occipital lobe</th><td></td><td></td><td></td><td></td></tr><tr><th>temporal lobe</th><td></td><td></td><td></td><td></td></tr><tr><th>cerebellum</th><td></td><td></td><td></td><td></td></tr></tbody></table>		Nuclear	Stars	Galaxies	Extra	parietal lobe					frontal lobe					occipital lobe					temporal lobe					cerebellum					
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<p>A scientist studies a process in which a neutron strikes a ^{216}Pu nucleus to make a ^{104}Cd nucleus, a ^{110}Pd nucleus, and 3 neutrons. If the scientist measures the mass of the ^{216}Pu nucleus and the original neutron and then subtracts the mass of the ^{104}Cd nucleus, the ^{110}Pd nucleus, and the mass of 3 neutrons, what type of number will the scientist get as a result?</p> <p>Choose one answer.</p> <p><input type="radio"/> a. Zero</p> <p><input checked="" type="radio"/> b. Positive number</p> <p><input type="radio"/> c. Negative number</p> <p>1 A ^4He nucleus and a ^7Li nucleus collide and form a ^{10}B nucleus and a neutron. Is this nuclear fusion or nuclear fission?</p> <p>Choose one answer.</p> <p><input checked="" type="radio"/> a. Nuclear fusion</p> <p><input type="radio"/> b. Nuclear fission</p> <p>What nuclear process occurs in the sun's core?</p> <p>Choose one answer.</p> <p><input type="radio"/> a. Nuclear fission</p> <p><input checked="" type="radio"/> b. Nuclear fusion</p> <p>The process by which two or more small nuclei fuse to make a bigger nucleus. <input type="text" value="Nuclear fusion"/></p> <p>The process by which a large nucleus is split into smaller nuclei. <input type="text" value="Nuclear fission"/></p>	<p>Nuclear Energy</p>																														

What are the two main types of variable stars?

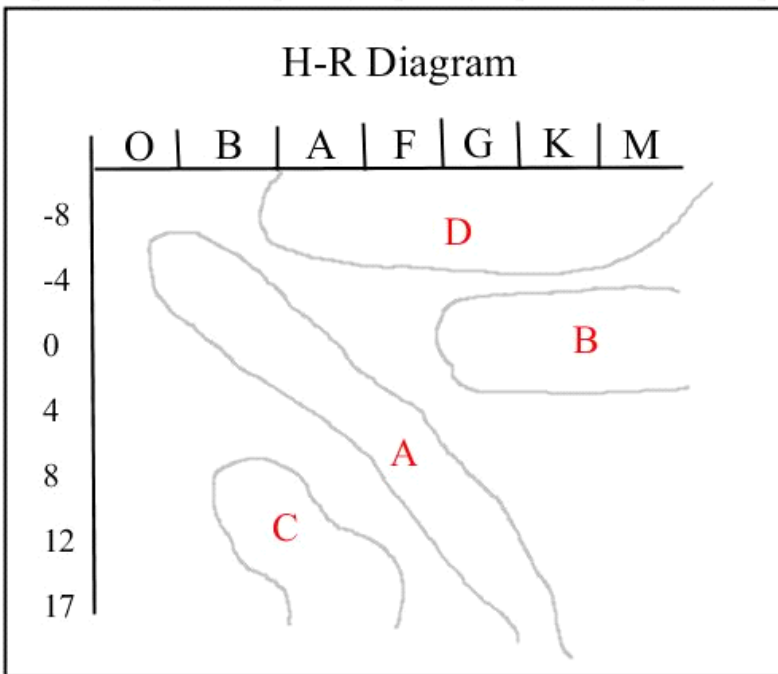
- Choose at least one answer.
- a. White dwarfs
 - b. Pulsating variables
 - c. Main sequence stars
 - d. Supergiants
 - e. Novas
 - f. Red giants

The brightness of a star as seen in the night sky. The smaller the number, the brighter the star. Apparent magnitude ▾

The brightness of a star, corrected for distance, on a scale of -8 to +19. The smaller the number the brighter the star. Absolute magnitude ▾

What are Cepheid variables, and why are they important in astronomy?
Cepheid variables are variable stars whose magnitude and period have a direct relationship. They are important in astronomy because that relationship can be used to measure long distances in the universe.

Using the H-R diagram below, classify the following stars:



- Magnitude 11, Spectral Letter B White dwarf ▾
- Magnitude -6, Spectral Letter A Supergiant ▾
- Magnitude 5, Spectral Letter G Main sequence ▾
- Magnitude 2, Spectral Letter K Red giant ▾

Stars -

What is the name of the galaxy to which earth's solar system belongs? What type of galaxy is it?

Choose one answer.

- a. Andromada Galaxy, spiral galaxy
- b. Milky Way Galaxy, spiral galaxy
- c. Milky Way Galaxy, irregular galaxy
- d. Andromada Galaxy, irregular galaxy

A large ensemble of stars, all interacting through the gravitational force and orbiting around a common center.

Galaxy

The distance light could travel along in a straight line in one year.

Light year

What is red shift?

The red shift is the phenomenon in which light that comes to the earth from other galaxies ends up having longer wavelengths than it should. Most astronomers interpret that as a Doppler shift resulting from the expansion of the universe.

The amount of isotope necessary to sustain a chain reaction.

Critical mass

Is it possible for a nuclear power plant to experience a nuclear explosion? Why or why not?

No, it is not possible, because a power plant does not have significantly more than the critical mass of the large nucleus.

However, often the rods are coated and the coating can break down into hydrogen gas if the rods overheat. Hydrogen gas is explosive.

Quiz: <http://www.virtualhomeschoolgroup.com/mod/quiz/view.php?id=17749>

Exam: <http://www.virtualhomeschoolgroup.com/mod/quiz/view.php?id=17751>

Galaxies

Extra