What You Should Know!

1.) Where does man stand in the universe (a six foot high creature walking around on a piece of nothing . . .)

2.) What did the Hubble telescope see when it looked out into a piece of "empty" sky?

3.) Newton's theory unifies what? How does it do this?

4.) Maxwell's theory unifies what? How does it do this?

5.) According to Newton, what causes gravitational effects?

6.) According to Einstein, what causes gravitational effects?

7.) If the sun were to suddenly disappear, the earth would at some point be released from its orbit and would leave the solar system in a straight line.

a.) How fast would this occur in Newton's perspective.
b.) What would cause this changing of motion in Newton's perspective.
c.) How fast would it occur in Einstein's perspective?
d.) What would cause this changing of motion in Einstein's perspective?

8.) To what did Einstein devote his later life? Did he succeed?

9.) What is the goal of *string theory*?

10.) What was the main stumbling block in the attempt to unify gravity with the quantum mechanics?

11.) How much stronger is the electromagnetic force than gravity?

12.) What happened in the 1920's that turned physics on its head?

13.) What is the hallmark of Quantum Mechanics?

14.) How is Quantum Mechanics different from Einstein's physics?

15.) In Quantum Mechanics, can you predict the outcome of a particular experiment?

16.) Has there ever been a Quantum Mechanics prediction that contradicted observation?

17.) What does the strong force do?

18.) What does the weak force do?

19.) When the atomic bomb was detonated in 1945, what force came into play during the explosion, and how much energy was released?

20.) Where did Einstein do his early work in life?

21.) Where did Einstein do his later work in life?

22.) What did Einstein think of Quantum Mechanics?