

The Universe: Season Two: Dark Matter

Name _____ Period _____

Elusive Dark Matter

Does dark matter interact with light?

What is the Minnesota connection with dark matter? What does this laboratory do?

What was Edwin Hubble's big discovery?

What is the problem that first indicated (1933) that dark matter exists?

How do we know that there must be dark matter?

What is the method by which we detect dark matter?

The Search for Wimps

What is a W.I.M.P.?

How does the CDMS at Soudan Mine work?

Backbone of the Visible World

Can we ever find the point where the Big Bang began?

Why do we refer to dark matter as the "backbone" of the Universe?

What percentage of the Universe is dark matter?
_____ visible matter? _____

What is dark energy?

Creating Space

How did Hubble use the Doppler effect to measure the movement of galaxies?

If you are looking back in time, what are you looking at?

What is a standard candle?

Is the universe's expansion slowing down or speeding up? _____ Why?

How does dark energy create space?

When were dark matter and dark energy created?

When did the universe's expansion start to accelerate? At _____ billion years.
(the universe is about 13.7 billion years old)

Mysteries of the Dark Side

What is Einstein's cosmological constant?

If exponential expansion occurs, what is the fate of the universe?