

Listen for the answers to these questions during the video:

What do observations of molecular hydrogen tell us about the structure of the Milky Way?

How do we know that the galaxy is rotating “like horses on a merry-go-round”?

Why does the thickness of the Milky Way's disk depend on which infrared wavelength is used to observe it?

Answer these questions while watching the video:

In the mid-1800s, the best telescopes could resolve some of the fuzzy blobs into crisp spiral shapes.
_____ and irregular shapes were also seen.

_____ obscures our view of most of the Milky Way galaxy.

Karl Jansky is the father of _____ astronomy.

Grote Reber built the first radio telescope where? _____

All the warm objects around us, including people and the atmosphere, emit what? _____

At radio wavelengths we only see the _____ in the Milky Way. We are seeing concentrations of
_____.

Carbon monoxide is a tracer of the much more elusive _____.

Far infrared observations show us the location of warmer dust heated by _____.

The shortest infrared wavelengths show us the location of cool _____ and very warm _____.

The two most prominent features in the infrared are the _____ and the disk of the galaxy.

Summary Section of the Video:

During the summary section, write down the information that each bandpass has given us.

Visible observations have told us:

Radio observations (including molecular and atomic hydrogen observations) have told us:

Infrared observations have told us?