Chapter 15

Our Galaxy: The Milky Way
The rotation curve of the Milky Way remains nearly flat... over 100,000 light-years from the center of the galaxy.
Imagine that you could travel at the speed of light. Starting from Earth, how long would it take you to travel to the center of the Milky Way Galaxy?

a) 2 years  
b) 20 years  
c) 250 years  
d) 2,500 years  
e) 25,000 years
Where is our Sun located in the Milky Way Galaxy?

a) at the exact center

b) near the center

c) about half way between the center and the outer edge

d) near the outer edge
In general, the Milky Way

a. Has the same chemical composition as time passes

b. Has more abundant Hydrogen as time passes

c. Has more abundant heavy elements as time passes

d. Has less abundant heavy elements as time passes
In the disk of the Milky Way, stars are __________ and dust and gas are ________ than in the halo.

a. Younger; more diffuse
b. Older; more diffuse
c. Older; denser
d. Younger; denser

The Milky Way galaxy

a. Has been exactly the same since it first formed
b. Has only changed in number of stars since it first formed
c. Is still evolving, consuming nearby galaxies
d. Is finished evolving, and will not change any more