1. What is meant by a "non stationary signal"?

2. What are some shortcomings with the use of Fourier analysis for non stationary signals?

3. If Fourier analysis is described as expanding a function in an infinite series of sines and cosines, how would you describe wavelet analysis?

4. Describe in words what is meant by a wavelet.

5. Describe in words what is meant by a wave packet.

6. What *uncertainty principle* holds for wavelets?

7. What is the relation between *scale* and frequency?

8. When performing a wavelet transform, what is the purpose of the *translations* by τ?