

## Practice Wave Questions

1. A microwave emits waves of 10cm. What is the frequency of the waves?
2. An oil tanker on the ocean is caught in a storm. The captain finds that the waves swell 30 times in 2 minute. The ship is 300m long and it takes a wave 90 seconds to travel the length of the ship. What is the wavelength of the water waves?
3. Two paddlers are in a boat 20m from shore. They find that the boat rocks up and down 16 times in 25 seconds. They also find that a single wave takes 5 seconds to travel between the boat and the shore. What is the wavelength of the water waves?
4. An adjacent trough and crest are 4m apart. If the waves travel at 100m/s, what is the frequency?
5. Draw a sine wave with an amplitude of 4cm and a wavelength of 6 cm. (Have a minimum of 3 full waves)