

EOSC 114: The Catastrophic Earth: Natural Disasters

encircle one: Section 101 Section 102

Last Name, First Name, Student Number: _____

I worked with: Last Name, First Name: _____

 Last Name, First Name: _____

 Last Name, First Name: _____

1) Consider a wave with $L = 100$ m. As it passes a patch of ocean where depth is indicated on column 1, fill in columns 2 – 3 in the Table below.

Depth of Water, d	Is $d \geq L \div 2$?	Is $d \leq L \div 20$?	Type of Wave (deep, intermediate or shallow)
75 m			
50 m			
25 m			
10 m			
5 m			

2) Consider a patch of ocean with depth as indicated in row 1. As a wave passes this patch of ocean, what should be its maximum wavelength to be considered a deep water wave (row 2)? what should be its minimum wavelength to be considered a shallow water wave (row 3)?

	$d = 4,000$ m	$d = 500$ m	$d = 5$ m
Maximum L to be a Deep water wave			
Minimum L to be a Shallow water wave			