

## **TSUMANIS AND SURF WAVES VENN DIAGRAM Tsunamis waves Surf waves** © The University of Waikato Te Whare Wānanga o Waikato | www.sciencelearn.org.nz

A form of energy transfer	Suitable for surfing	Can travel at hundreds of km/h	May form a turbulent bore
Become higher in shallow water	Travel at less than 50km/h	Can undergo diffraction	Occupy the water surface only
Breaking waves	Usually non-breaking waves	Caused by an in-water disturbance	Occupy the whole ocean depth
Can interfere with other waves	Wavelength of hundreds of km	Caused by wind	Period of 10–60 minutes
Can reflect and refract	Wavelength of tens of metres	Have a frequency and wavelength	Period of a few seconds
Can resonate ('slosh')	Suitable for surfing	Can travel at hundreds of km/h	Slow down in shallow water