process that occurs when tectonic plates of different densities collide	plate that is wholly oceanic and mostly basalt	where tectonic plates collide	occurs between subducting crust and underside of overriding plate
subduction	Pacific Plate	convergent boundary	friction resulting in melting of crust
name for area where tectonic plates of different densities collide	one of Earth's deepest oceanic trenches formed by subduction of PP under AP	type of volcanic activity when sediments are waterlogged	intermediate to high silica rich magma
subduction zone	Kermadec ridge / trench	explosive / gas rich activity	dacite eruption
causes explosive eruptions due to lowered melting point of crust material	name of the plates locked together under lower NI	area of NI NZ where Pacific Plate is subducting under Australia plate	subducting plates are forced down towards the _____ creating areas of _____
water	Pacific and Australian	Taupo volcanic zone (TVZ)	mantle magma / molten rock
hot magma _____ as it is less dense than surrounding rock	magma rises as less dense than surrounding material reaches surface causing..	highly pressurised hot underground reservoir water escaping through a narrow opening in the crust	Pacific Plate is _____ dense than australian plate
rises	volcanic activity	geyser	more

series of long wave-length water waves caused by displacement of large volume of a body of water	most common cause of tsunamis – sudden change to seafloor due to...	causes of tsunamis (other than seafloor earthquake) include...	mountain slips into sea - landslide that displaces large water volumes is a ...
tsunami	seafloor earthquake > Richter magnitude 7	submarine landslides, and volcanic eruptions	submarine landslide
can be generated when thrust faults at plate boundaries move suddenly	a tsunami is a displacement of water caused by _____ transmission	direction of seafloor movement that displaces water causing tsunami	the carrier of energy from an earthquake through water
tsunamis	energy	vertical	wave
magma that is more fluid hotter, lower silica & usually gas poor – fractional melting of oceanic crust	silica and gas rich, thick, viscous and highly explosive – continental crust melted by pools of basaltic magma	intermediate in viscosity, silica and explosiveness - mix of molten oceanic and continental crust	direction of movement under the seafloor / energy release that does not cause tsunami
basaltic magma	rhyolite magma	andesitic lava	horizontal
Mt Tarawra eruption (1886) is example of eruption involving _____ magma	Lake Taupo eruption 26 500 years ago is e.g. of eruption involving _____ magma	Mt Ruapehu eruptions are examples of eruption involving _____ magma	different _____ causes different volcanic forms / shapes
basaltic	rhyolite	andesitic	lava

pressure build ups. eventually some pressure is released and plates move releasing a huge amount of energy	fault type when 2 plates (of similar density) are pushing into each other	point of origin of seismic waves	point on earth's surface above point of origin of seismic waves / focus
cause of earthquake	transform or strike-slip fault	focus	epicentre
how energy of earthquake radiates out and is transmitted	area most likely to have sand boils and liquefaction is directly above the _____	as distance increases from the focus point, the shaking is _____	the closer the focus is to the surface, the _____ the damage done
absorption, reflection and refraction	focus	reduced (by inverse square of distance).	greater
earthquake damage decreases with distance from focus due to	land composition near surface (underlying soil, H_2O content & rock) determines amount of _____ damage	denser oceanic Pacific Plate, mostly basalt, is dragged under Australian plate by _____	friction between plates leading to pressure build-up which is eventually released causes ...
dissipation of energy	surface	gravity	earthquakes
when the subduction zone is close to earth's surface the earthquakes are...	magma which is more silica rich and viscous than andesite magma	pyroclastic material - a fine-grained rock made mainly of ash that falls from the air during an eruption	friction between plates leading to pressure build-up is due to __ __ movement
large magnitude / frequent	dacite magma	tuff	tectonic plate

rock with vesicles formed due to trapped gases	as silica content of lava decreases its viscosity...	raised rim made of tuff occurring around an explosion crater	3 different types of eruption (basaltic, rhyolitic & andesitic) are possible in one volcanic zone because....
scoria	decreases	tuff ring	of subduction zone of oceanic crust subducting under continental crust
		molten rock material	molten magma that has reached the earth's surface
Lake Pupuke - basaltic volcanic eruption - under sea	Mount Eden - basaltic volcanic eruption - on land	magma	lava
a volcanic cone composed of scoria that has been erupted from a vent	the tendency within a liquid to resist flow	silica content, the water and gas contents will determine the ___ of lava	
scoria cone	viscosity	viscosity	