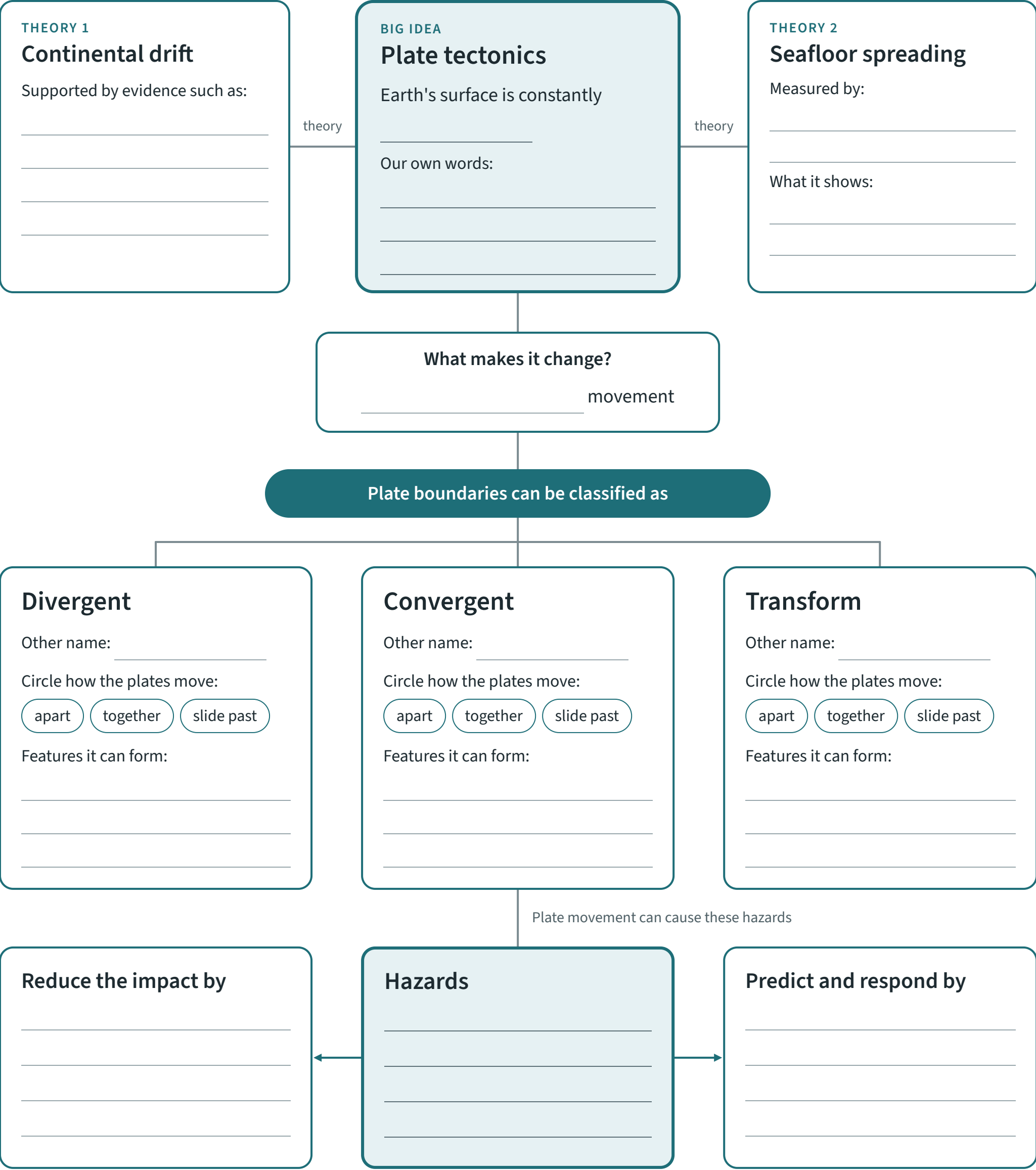


Map it | Plate tectonics

Fill the boxes together. Talk it through first, then write a word or short phrase. Use the **word bank** if you get stuck.

Name: _____

Date: _____





Answer guide

Accept their own words if the meaning is right. **Talking it through counts more than spelling.**

Plate tectonics

Big idea: changing.

Continental drift evidence: matching coastlines, fossils, rock types, coal and glacier locations.

Seafloor spreading measured by: mapping the ocean floor, magnetic striping.

What it shows: new seafloor forms at ocean ridges and spreads outwards, so the plates are moving apart.

What makes it change: tectonic plate movement.

Divergent: constructive · plates move **apart** · rift valleys, ocean ridges.

Convergent: destructive · plates move **together** · mountains, trenches, subduction zones.

Transform: conservative · plates **slide past** · earthquakes are the main result. (Accept: few landforms.)

Hazards: volcanoes, earthquakes, tsunamis.

Reduce the impact: land-use planning, building design, emergency planning.

Predict and respond: GPS, computer modelling, drones and emergency services.

Rocks and minerals

Minerals are the building blocks of rocks.

Igneous: cools from magma or lava, e.g. granite, basalt.

Sedimentary: layers pressed together, e.g. sandstone, coal.

Metamorphic: changed by heat and pressure, e.g. marble, slate.

Minerals classified by: colour, lustre, transparency, streak, hardness, cleavage.

Rocks classified by: crystal size and shape, grain size and shape, colour, density and porosity.

Mining process: 1 exploration · 2 planning and design · 3 construction · 4 mining · 5 processing · 6 closure and rehabilitation.

Connect the maps, convergent: metamorphic. (Also igneous from volcanoes; accept with reasoning.)

Connect the maps, divergent: igneous.

Curriculum links: Year 8 Earth and space sciences

WA8SSUE1 · plate tectonics and the features formed at divergent, convergent and transform boundaries.

WA8SSUE2 · rocks are made of minerals; the rock cycle forms igneous, sedimentary and metamorphic rocks.

WA8SSUE3 · classifying minerals by physical properties; extracting useful resources.

Achievement standard: describe the geological features that form at plate boundaries; describe rock formation processes; classify rocks and minerals using their physical properties.