A simple model of the evolution of the early Earth, Part I

Meteorite impacts and radioactivity heat the early Earth to the point of melting (red arrows indicate heat flow). Denser elements migrate to the center, and lighter to the outside.

Cooling of the surface makes the outermost rind denser, and parts of it sink.

As those outer parts sink, water that they release induces melting of more sialic components, and magma rises to make small volcanic chains. See Part II for more.