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

Randomly scattered matter drifts in the solar nebula. Particles' gravity pulls them together (denser particles are shown in darker colors).

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.