

## Rock Cycle Cause-and-Effect Detective

**Instructions:** Below is a list of **geological processes** (the “cause”) and a list of **rock changes** (the “effect”). Each process matches with **only one** effect. Your job is to play detective: connect each cause to its correct effect by writing the matching letter before its corresponding number. Be careful: some effects might sound similar, but the details matter!

1. Cooling and solidification of magma
2. Compaction and cementation of sediments
3. Heat and pressure without melting
4. Weathering and erosion by wind, water, or ice
5. Melting deep underground
6. Deposition of sediments
7. Volcanic eruption of lava
8. Uplift of rock layers

- A. Rock fragments are laid down in new locations, forming layers.
- B. Sediments harden into sedimentary rock.
- C. Igneous rock forms as magma cools beneath Earth's surface.
- D. Rock is broken down into small particles.
- E. Metamorphic rock forms from existing rock due to intense heat and pressure.
- F. Rock layers rise to the surface where they can be weathered.
- G. Igneous rock forms quickly as lava cools at the surface.
- H. Solid rock melts into magma.

