1. **Magma** cools and crystallizes to form **igneous rock**.
2. Igneous rock undergoes **weathering** (or breakdown) to form **sediment**. The **sediment is transported and deposited** somewhere (such as at the beach or in a delta, or in the deep sea).
3. The deposited sediment undergoes **lithification** (the processes that turn it into a rock). These include **cementation** and **compaction**.
4. As the sedimentary rock is buried under more and more sediment, the **heat and pressure of burial** cause **metamorphism** to occur. This transforms the sedimentary rock into a **metamorphic rock**.
5. As the metamorphic rock is buried more deeply (or as it is squeezed by plate tectonic pressures), **temperatures and pressures continue to rise**. If the temperature becomes hot enough, the metamorphic rock undergoes **melting**. The molten rock is called **magma**. This completes the cycle.

Now if you look at the processes going on in the middle of the diagram, note that:

1. **Any rock type can undergo weathering** (breakdown) to form sediment, followed by transportation and deposition of the sediment. Both metamorphic and sedimentary rocks can undergo weathering.
2. **Igneous rocks can undergo metamorphism** (as a result of heat and pressure) to form metamorphic rocks.

