

Phenocrysts vs. Fragments

1. Size range

Phenocrysts nucleate (start to form) when the magma/lava becomes over saturated with that mineral and continue to grow until everything is solid.

Phenocrysts should all be about the same size.

Fragments are broken up material of all sizes.

2. Shape

Phenocrysts are forming in a liquid (an unrestricted environment) and thus should exhibit crystal faces.

Fragments are broken up material of any shape.

3. Composition

Phenocrysts form when the magma/lava becomes over saturated with that particular mineral or minerals. Phenocrysts are usually one or sometimes two minerals.

Fragments can be any composition.