

ANORTHOSITES: *Igneous (volcanic) rock*

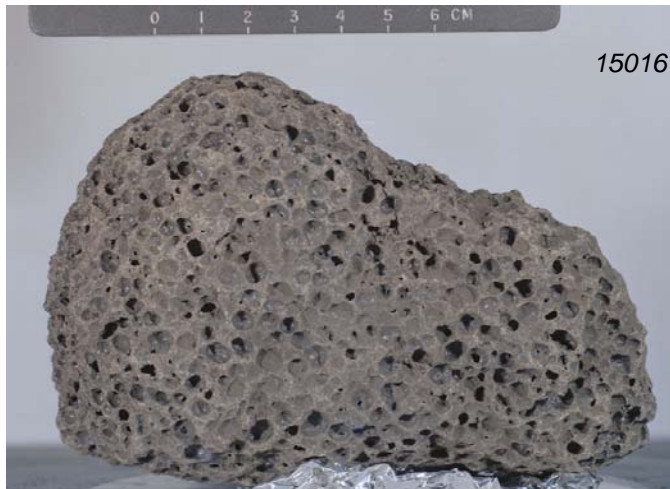
Represent original lunar crust that formed ~4.5 – 4.3 billion years ago



CHARACTERISTICS:

- Brighter/lighter in color than mare basalts
- Very friable (easily breakable)
- Generally coarse grained (can see individual minerals)

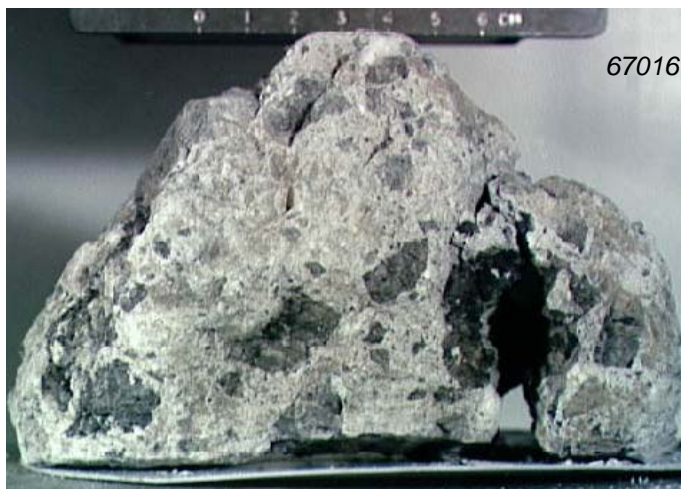
BASALTS (MARE BASALTS): *Igneous (volcanic) rock*



CHARACTERISTICS:

- Dark gray to black in color
- Fine grained (you cannot easily see the individual minerals that make up the rock)
- Usually includes holes (vesicles)
- Rough texture
- Hard surface

IMPACT BRECCIAS: *Composite rock formed by impact events*



CHARACTERISTICS:

- Mixture of both fine and coarse grained rock and mineral fragments
- Appear to have features that look similar to basalts and/or pristine highland rocks
- Appear to have fragments (clasts) that have been “cemented together” to form the rock

BASALTS

ANORTHOSITES

IMPACT BRECCIAS

BASALTS

ANORTHOSITES

IMPACT BRECCIAS

LUNAR GEOLOGIST PRACTICE

Classify these rocks as
either a **basalt**,
anorthosite, or **impact
breccia**.

Test your skills!