

made up of the same
colored felspar however
usually light colored.
minerals, among which
and beryl. Graphic
arranged through the
crystals in the ancient

darkish or gray. This
differs from it only in the
absence of quartzless granite.
The presence of quartz,
felsite is in a consider-
able amount of intermediate
between granite and the
dark rock known as
syenite of Hastings,
which is a felspar.

Rock and darker in
color, plagioclase instead of
orthoclase consists essentially of

very dark in color.
Typical specimens
show a variety of pyroxene
and an essential con-
nection related to gabbro,
often for crystalline
pyroxenite, and it is
usually found associated
with it at the same time
they are associated.
Some of the nickeliferous
gabbro-like rocks.

In some cases, a volcanic
rock is chemically com-
posed of the same or a coarsely
crystalline material in origin.
It differs from the material
usually formed from
earth and lost heat
minerals to arrange
themselves in a compara-
ble position, but is
composed of orthoclase

192. Pumice. This rock is a porous or vesicular obsidian. Pitch-
stone, which is resinous in appearance, may be looked on as a devitrified
obsidian. This name felsite is sometimes given to a devitrified glassy rock,
fine grained and compact in structure, and consisting of orthoclase intimately
mixed with some quartz. It has a flint-like fracture, and sometimes is very
dull or stony in appearance. The term felsite is however, like the names of
some other rocks, so differently used by different writers that its reputation as
a rock name is lost.

193. Trachyte. A volcanic rock which corresponds to syenite in
chemical composition, light gray in color and presenting a dull appearance.
Sometimes looks somewhat like a fine-grained limestone.

194. Andesite. This is the volcanic representative of diorite.

195. Basalt. Corresponds in chemical and mineralogical composition
to gabbro, and is one of its volcanic representatives. It is a dark, heavy,
close-grained rock, and is often known under the name of trap. It often
possesses a columnar structure, and frequently contains cavities through it
which are filled with agates, zeolites or other minerals. Basalt is a character-
istic rock on the north shore of lake Superior.

196. Columnar Trap.

197. Diabase. This is another volcanic representative of gabbro. It
differs from basalt in structure. Typically it consists of the two essential
minerals, plagioclase and augite, but olivine may also be present, when the
rock is known as olivine diabase. Diabase tends to weather at the surface of
the ground into spheroidal or ball-like masses. When examined in thin sec-
tions or slices under the microscope the plagioclase is seen to be in lath-like
strips which are set into the augite. On a weathered surface of the rock, in
hand specimens, the plagioclase laths may be seen as very fine short white lines,
a characteristic by which the rock may be distinguished. Of course if the
surface examined is much rusted or decomposed the lines do not come out.
Various accessory minerals are found in the rock. It forms dikes and masses
in different parts of Ontario, notably in the vicinity of Sudbury.

AQUEOUS ROCKS.

198. Conglomerate. This is composed of rounded fragments of various
rocks or minerals cemented together by calcium carbonate, iron oxide or
other material. A mass of it may be called a solidified gravel bed. Samples of
Aqueous
rocks.

199-200. Sandstone. Composed typically of quartz grains of various
colors cemented together, but the rock may be more or less impure from the
presence of other minerals. It possesses a bedded or stratified structure.

201. Shale. This rock is composed typically of clay. It is very fine-
grained and occurs in very thin layers.

202. Clay. The character and uses of this material are well known.

203. Kaolin. Ordinary clay is an impure form of this substance.

204. Limestone. Rocks of this class differ much in color, grain and
composition. Typically they are composed of the mineral calcite, together
with more or less dolomite. They are formed through the accumulation of