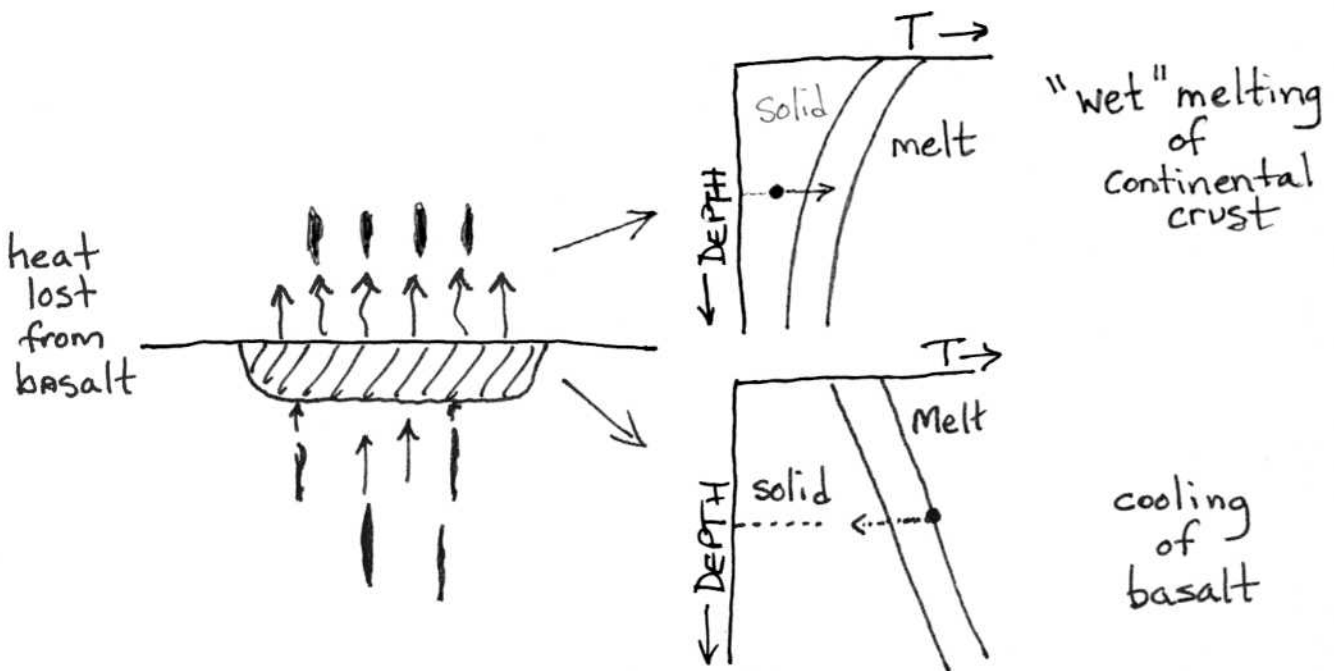
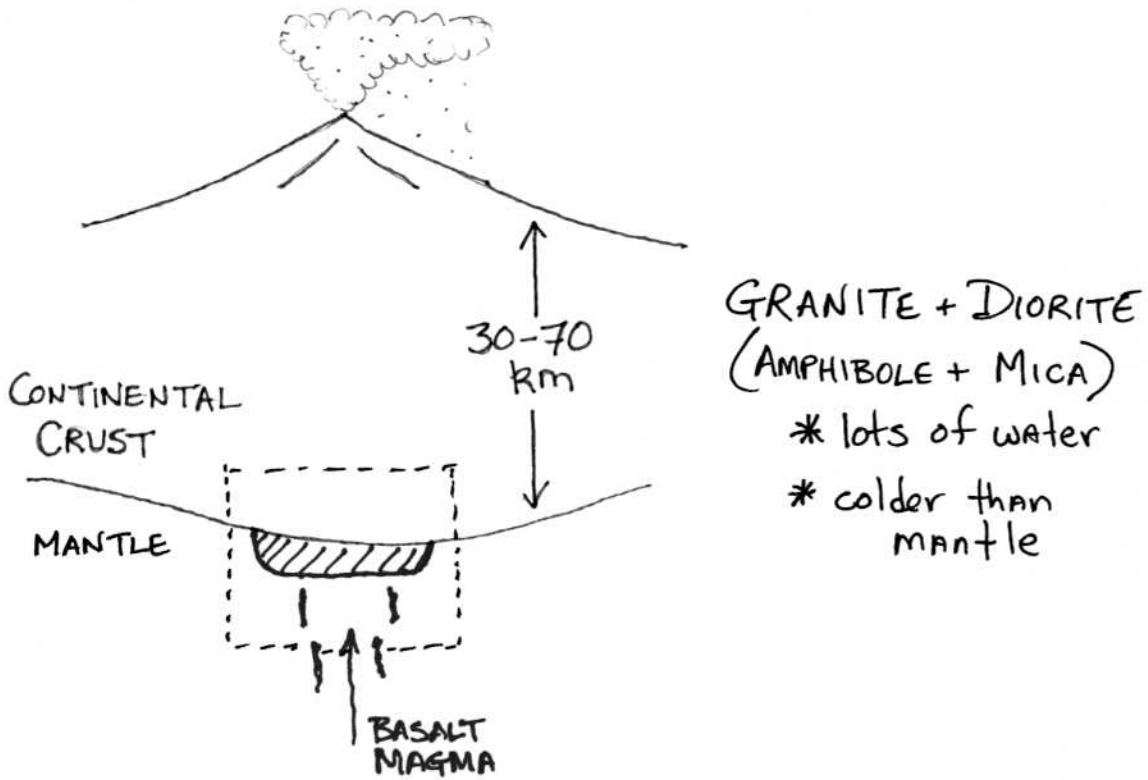
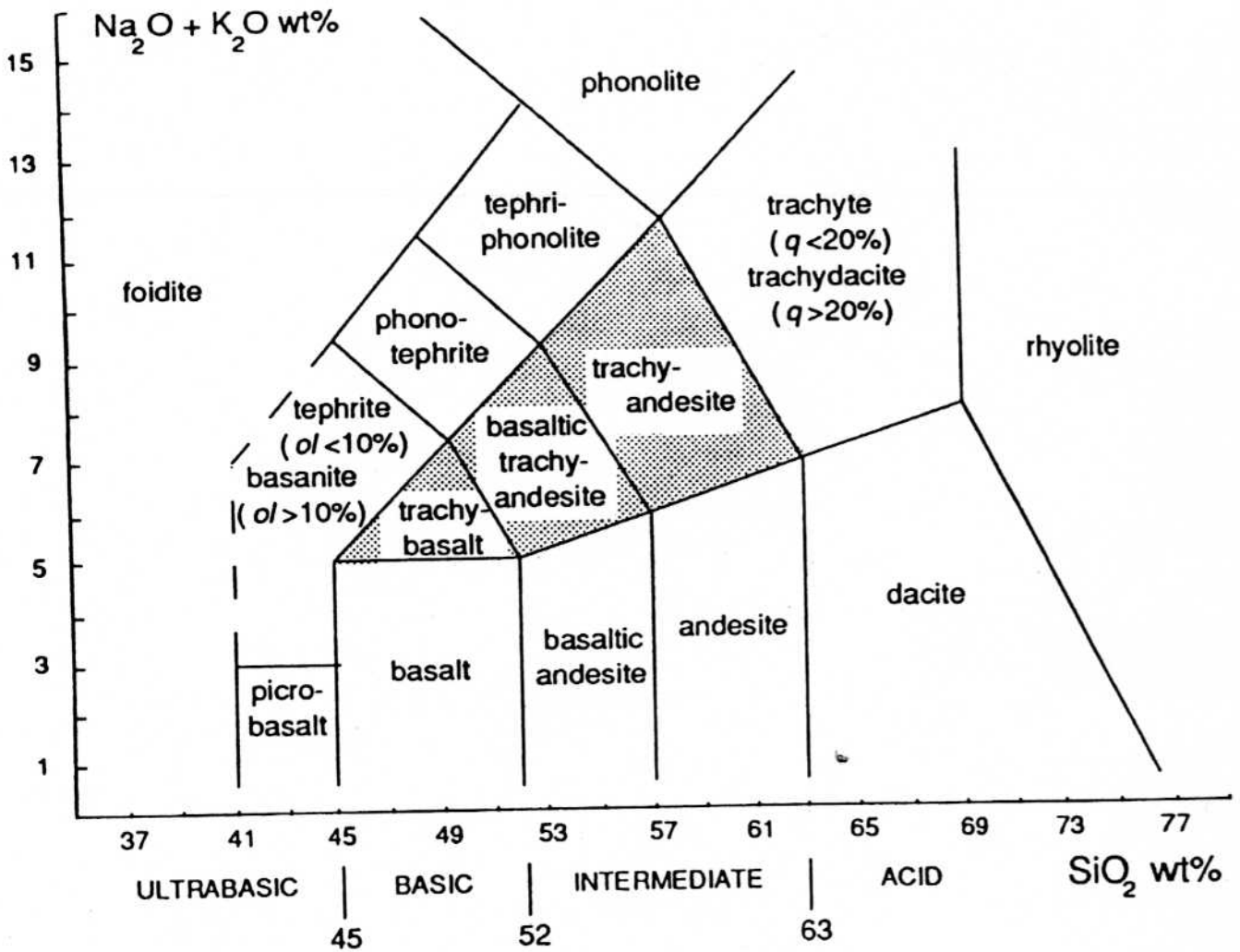


CONTINENTAL SUBDUCTION ZONES

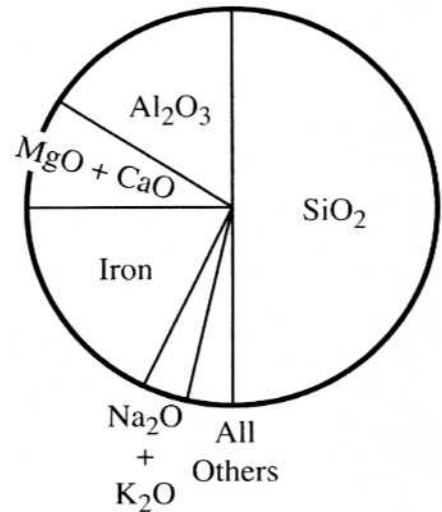




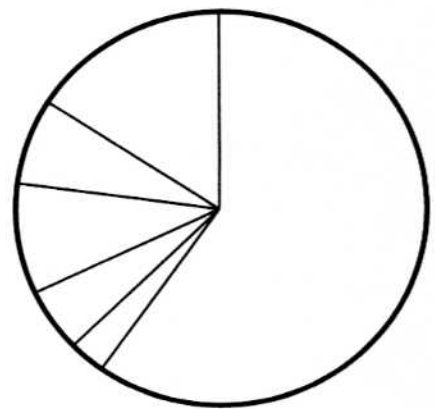
Further subdivisions of shaded fields	trachybasalt	basaltic trachyandesite	trachyandesite
$\text{Na}_2\text{O} - 2.0 \geq \text{K}_2\text{O}$	hawaiite	mugearite	benmoreite
$\text{Na}_2\text{O} - 2.0 \leq \text{K}_2\text{O}$	potassic trachybasalt	shoshonite	latite

Compositions of Common Magma Types

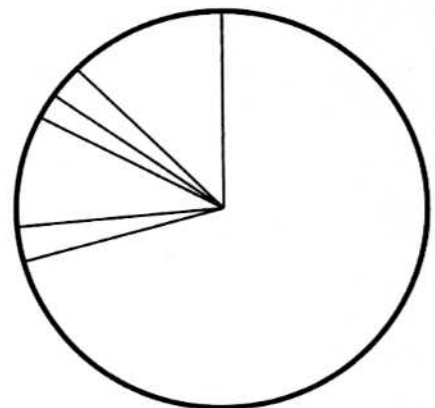
Basaltic Magma

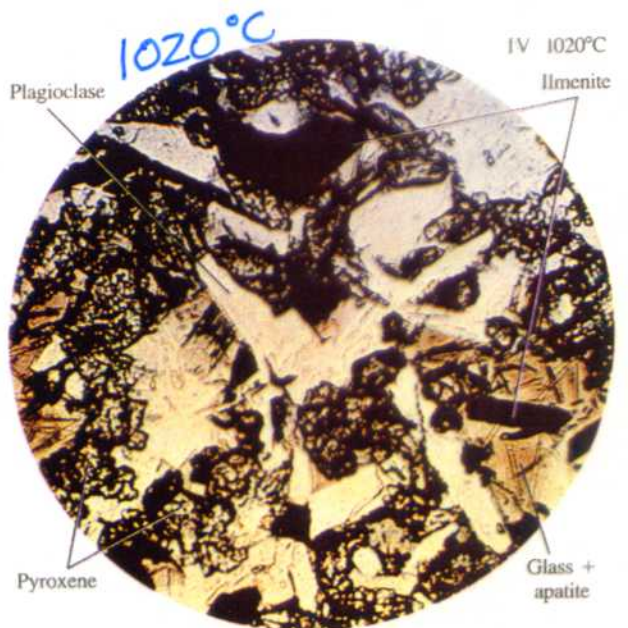
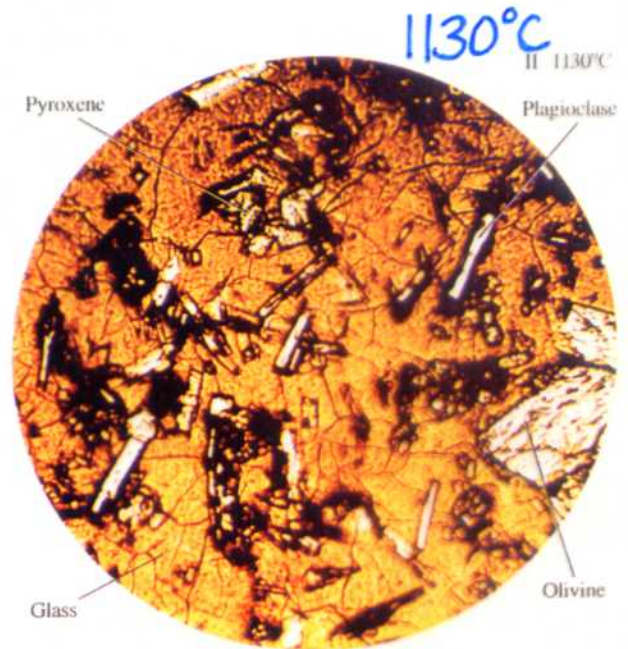


Andesitic Magma



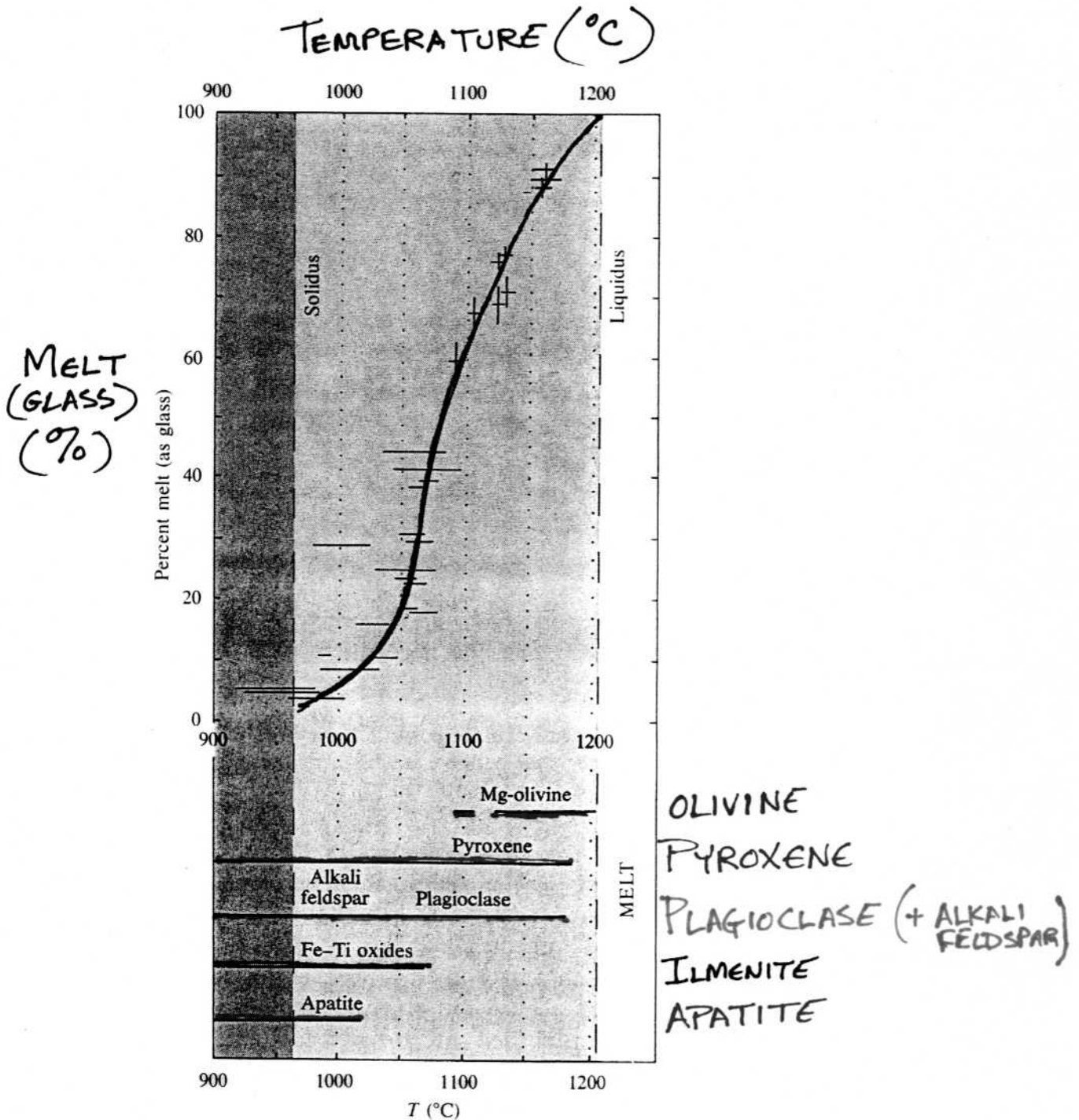
Rhyolitic Magma





This sequence of photomicrographs shows progressive crystallization of Makaopuhi basalt. The diameter of each view is about 1 mm. Plate I shows the initial stage of crystallization, at $T = 1170^{\circ}\text{C}$, in this sequence. Compare with Figure 8-6. (Courtesy of Thomas L. Wright, U.S. Geological Survey.)

Crystallization of MAKAOPUHI LAVA LAKE



"BOWEN'S REACTION SERIES"

"DISCONTINUOUS"

"CONTINUOUS"

olivines



Mg pyroxenes



Mg-Ca pyroxenes



amphiboles



biotites



potash feldspar



muscovite



quartz

(spinel)

calcic plagioclases



calci-alkalic plagioclases



alkali-calcic plagioclases



alkalic plagioclase



potash feldspar



muscovite



quartz