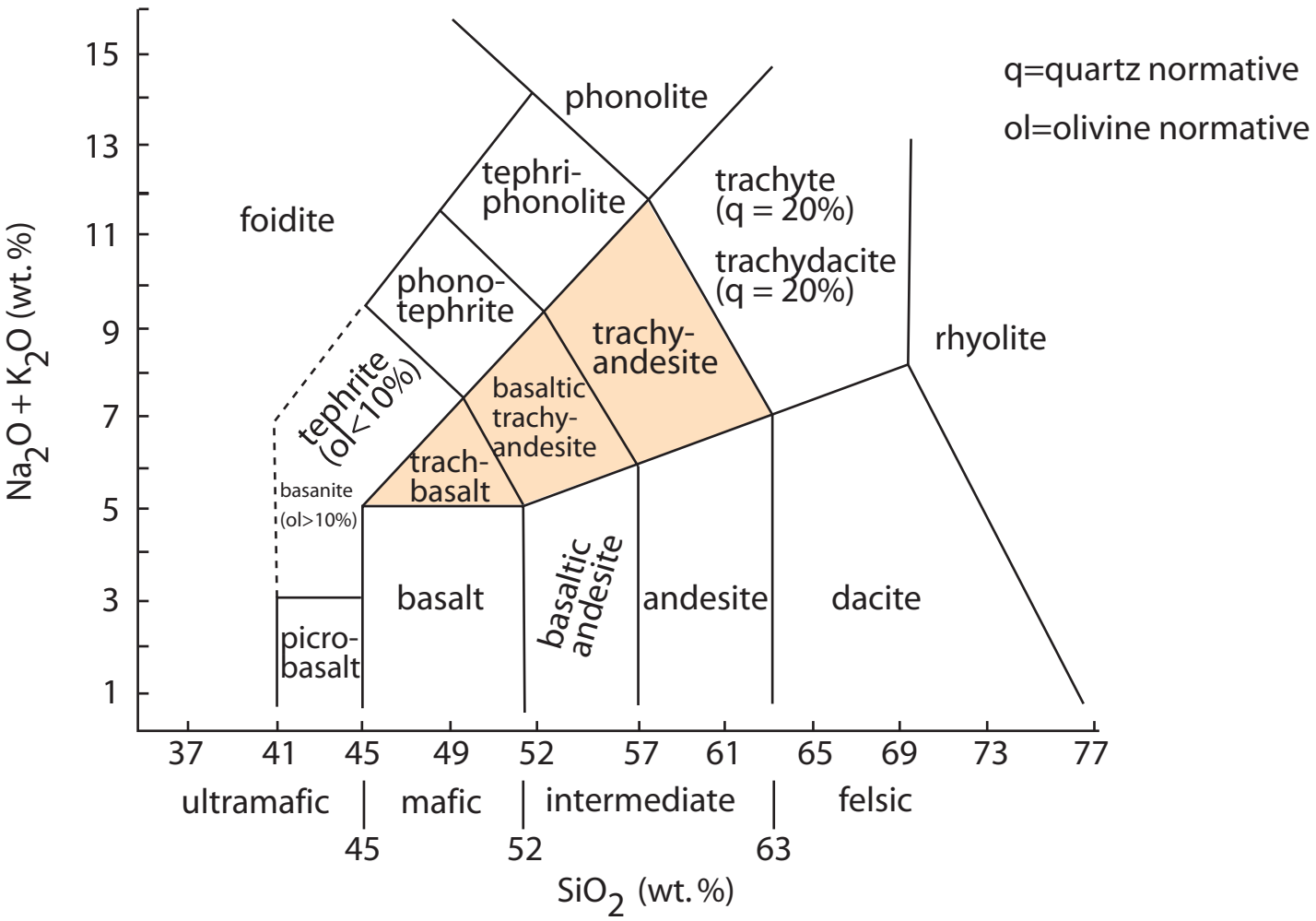
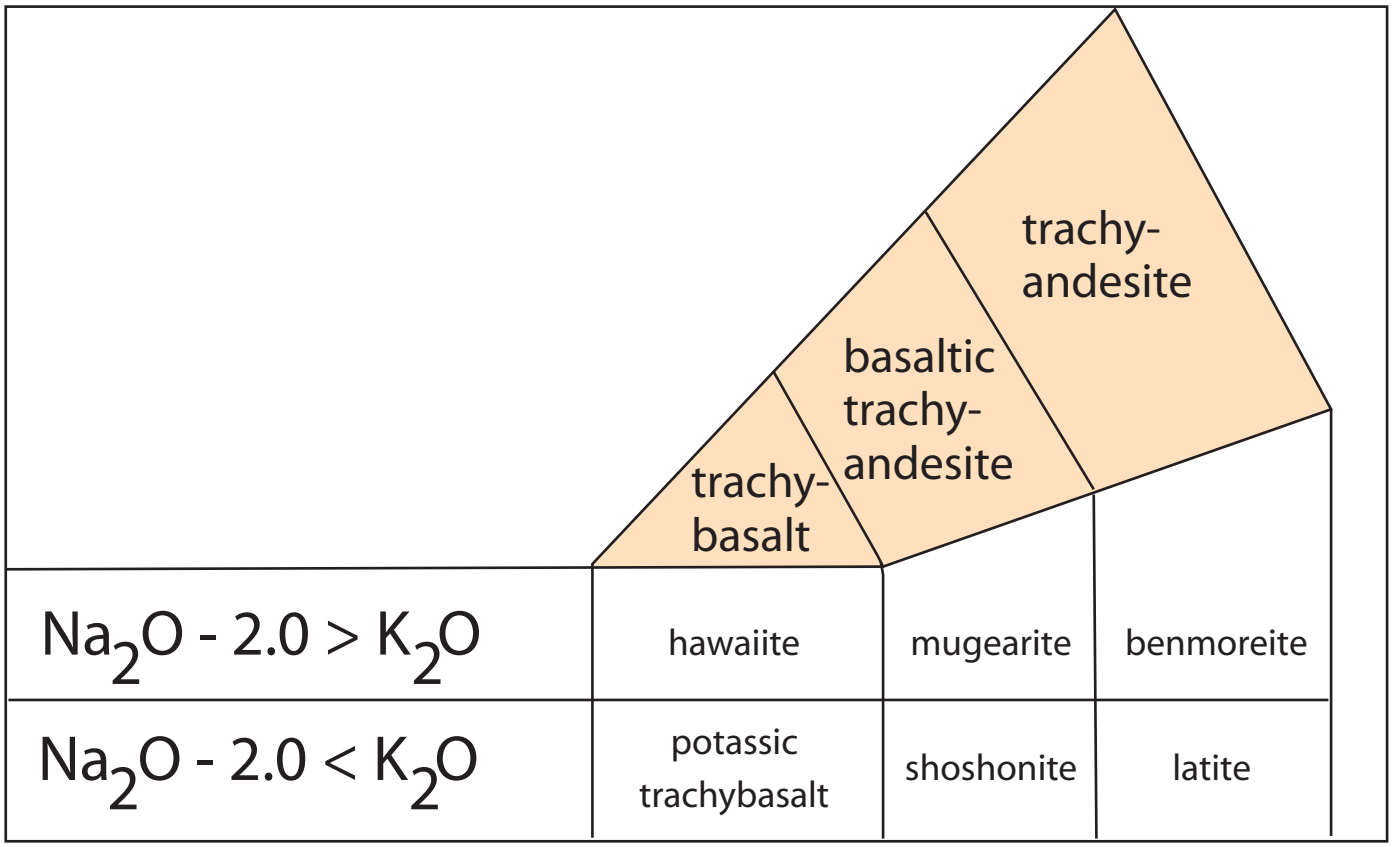

q=quartz normative
ol=olivine normative
phonolite
tephri-
phonolite
foidite
trachyte
(q = 20%)
trachydacite
(q = 20%)
phono-
tephrite
trachy-
andesite
rhyolite
tephrite
(ol<10%)
basaltic
trachy-
andesite
trach-
basalt
basanite
(ol>10%)
basalt
basaltic
andesite
andesite
dacite
picro-
basalt
15
13
11
9
7
5
3
1
$Na_2O + K_2O$ (wt. %)
37
41
45
49
52
57
61
65
69
73
77
ultramafic
mafic
intermediate
felsic
45
52
63
SiO_2 (wt. %)


trachy-
andesite
basaltic
trachy-
andesite
trachy-
basalt
$Na_2O - 2.0 > K_2O$
hawaiite
mugearite
benmoreite
$Na_2O - 2.0 < K_2O$
potassic
trachybasalt
shoshonite
latite