

# Stop 8, 15'

Name \_\_\_\_\_ Country \_\_\_\_\_

In this test you are expected to recognize the minerals of the rock, estimate their abundance and classify the rock based on the Strekeisen diagram.

Fill all tables and Strekeisen plot. Report the name of the rock.

Characters of the rock forming minerals (not all are present in the rock):

**Plagioclase:** White milky appearance, anhedral to subhedral (elongate prismatic habit), sometimes twinning and cleavage detectable.

**Quartz:** Colourless to greyish, is the most transparent, often anhedral interstitial, conchoidal fractures, no cleavage.

**Biotite:** Black-dark brown, vitreous lustre, thin cleavage system, hexagonal euhedral sections are in general subequant..

**Pyroxene:** Black, prismatic elongated, cleavage parallel to the elongation.

**Olivine:** Green, dark green, prismatic subequant, no cleavage.

**Oxides:** Equant, fine grained, black metallic lustre.

**Tourmaline:** Strongly elongated to acicular habit, light brown to greenish.

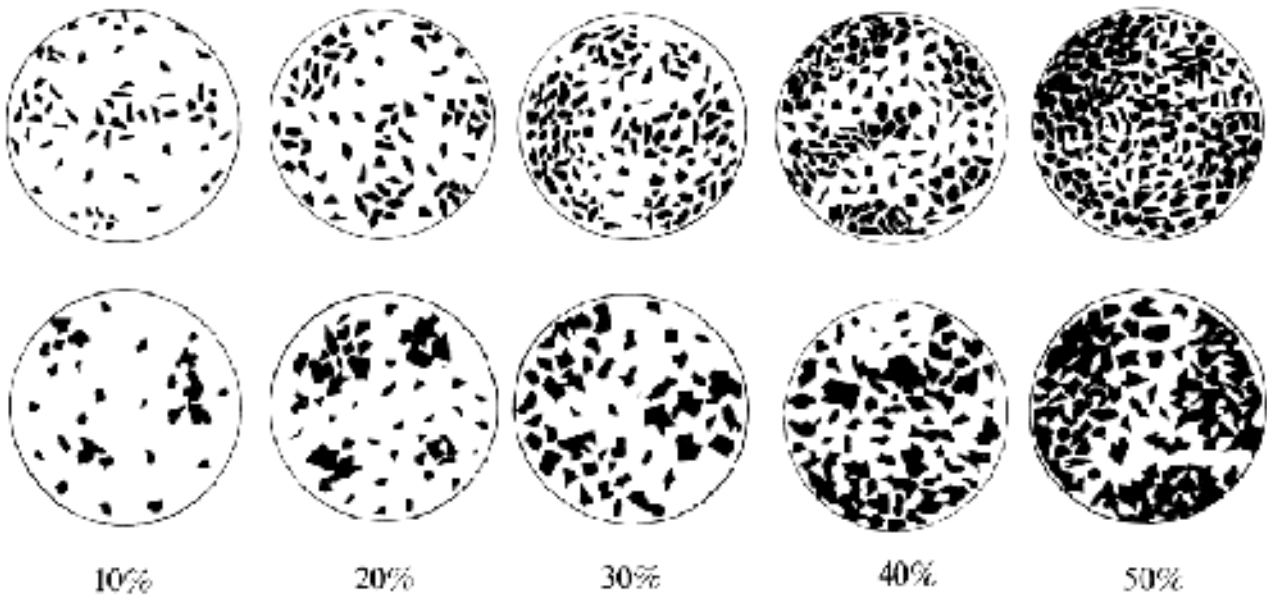
**K-Feldspar:** Orange to reddish, forms large crystals, anhedral to subhedral, sometimes twinning and cleavage detectable.

In the following table select the minerals you recognize on the selected areas of the pillar, then indicate the amount of each phase. Minerals not recognized must be indicated as 0%. To evaluate the amount of each mineral phase use the reference grids in the next page. Note that indicating the amount of minor phases as <10% means total is not expected to be 100%.

	0	<10%	10%	20%	30%	40%
Tourmaline						
K-feldspar						

Olivine						
Oxides						
Quartz						
Pyroxene						
Biotite						
Plagioclase						

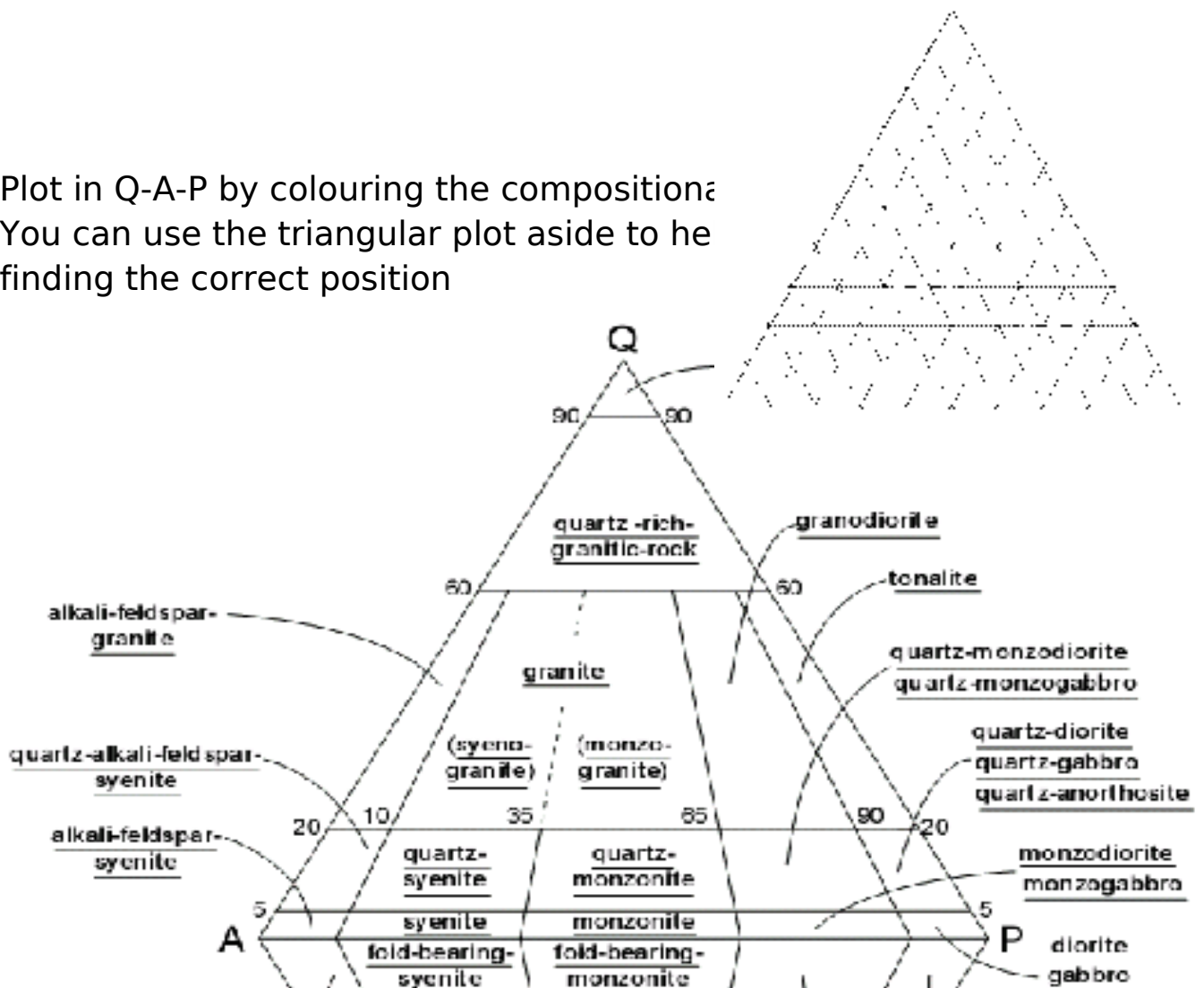
Reference grids



In order to define the rock you must recalculate the relative amount of Q, A and P

	Estimated value	Recalc to 100
Q (Quartz)		
A (K-feldspar)		
P (Plagioclase)		
Sum Q+A+P		Sum =100

Plot in Q-A-P by colouring the composition:  
 You can use the triangular plot aside to help finding the correct position



The observed rock is: \_\_\_\_\_

Score:

Plot in the right field: 4 points

Plot in the fields adjacent to the correct one: 1 points