CONTENT GUIDE FOR EOSC118

Porphyry Deposits

Sinclare, W.D. (2007). In Goodfellow, W.D. (ed.), Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods. Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 223-243.

This online article reviews the geological models of porphyry deposits in Canada and their role in the national mineral exploration and mining industry. It includes raw geological data, published information about the grades and tonnages of mines, and even common exploration techniques employed to find new deposits and ore zones.

We'll only read the following sections of the article:

Abstract
Definition
Geographical distribution
Importance

As usual, use the discussion board on Connect to pose questions, since questions that you have are probably being thought by another one of your fellow students.

Use the following questions to help you through the article:

1. What commodities are commonly present in porphyry type deposits? Cu and Mo, and are major sources of Au, Ag, and Sn
2. Are these deposits typically high grade or low grade? Large or small tonnage? large, low-med grade
3. Where in the world are most porphyry deposits found? in Canada? orogenic belts, in Euro and N/S america. Canada - copper mountain district
4. What are the lesser metals associated with Canadian porphyries? Re, In, and PGE
5. What are some of the less common commodities found in Canadian porphyries? platinum and silver? flourine