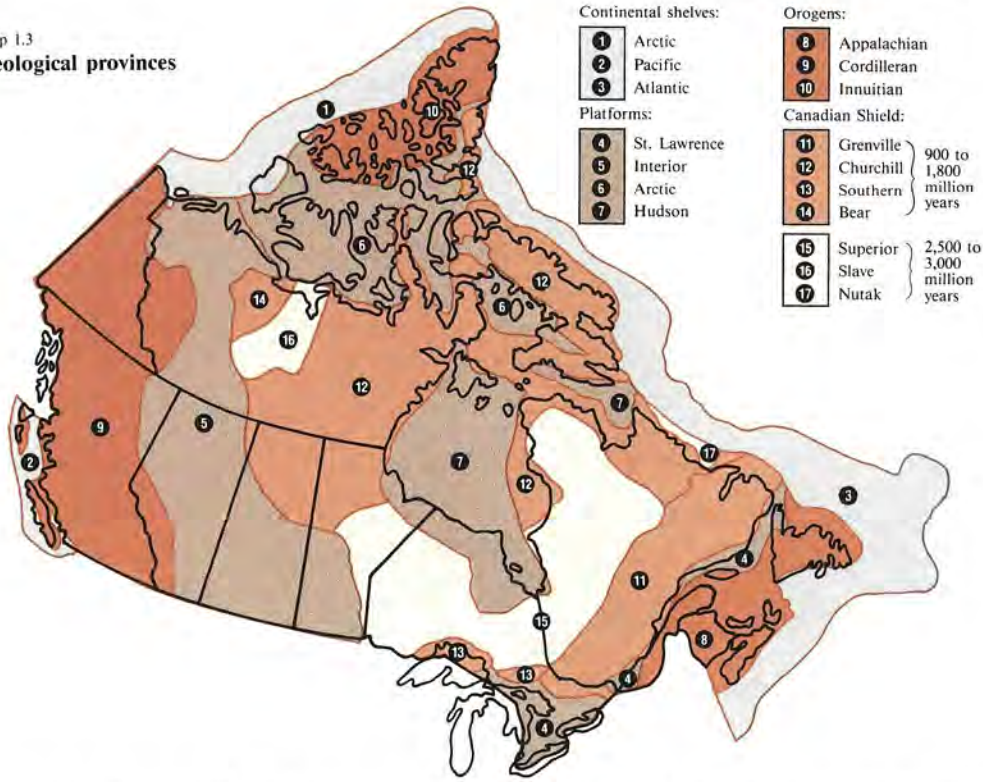
Map 1.3
Geological provinces



provincial and territorial boundaries and verifies descriptions of electoral districts.

A geographical services division provides geographical information and cartographic advice to other federal programs. This division produces the *National Atlas of Canada*, the *Canada Gazetteer Atlas*, aeronautical charts and air information required for regulation, safety and development of Canadian civilian and military aviation. A national geographical names data base provides information on the status, origin and location of the names of 350,000 geographical features and places in Canada.

A permanent committee on geographical names establishes federal policy for the treatment of geographical names. Its secretariat advises on the origin and use of names and geographical terminology. The committee of 20 members, representing both federal and provincial jurisdictions, recognizes the right of each province to make decisions on names in its own area.

An international boundary commission maintains a well-defined boundary line between Canada and the United States and regulates all works, such as buildings, pipelines and roads crossing or near the line.

Maps, aeronautical charts and air information publications may be purchased from the Canada Map Office. Reproductions of federal aerial photography and colour transparencies of selected LANDSAT satellite scenes of the landmass may be purchased from the National Air Photo Library.

1.3 Geology

Canada is composed of 17 geological provinces which are of four major categories; shield, orogen, platform and shelf.

The Precambrian Shield is a vast region covering most of eastern and north-central Canada in a broad band around Hudson Bay. It is composed of seven geological provinces. Three of them, Superior, Slave and Nutak, were deformed during the Archean Eon and contain the oldest continental crust known in Canada ranging from 2,500 to over 3,000 million years in age. Churchill, Southern and Bear provinces embrace ancient mountain belts produced 1,750 million years ago during a major Proterozoic orogeny. A younger Proterozoic orogeny about 1,000 million years ago deformed the Grenville province.

The shield was worn down by erosion in late Precambrian times. The sea encroached during the succeeding Paleozoic and Mesozoic eras and deposited sediments. These were largely stripped off by erosion in Cenozoic time. The shield has