LANDFORM REGIONS IN CANADA

Classroom Notes and Descriptions
Landform Regions in Canada

- There are eight distinct landforms in Canada:
  - Western Cordillera Region
  - Interior Plains
  - Canadian Shield
  - Hudson Bay Lowlands
  - Great Lakes-St. Lawrence Lowlands
  - Appalachian Region
  - Arctic Lowlands
  - Innuitian Mountains
Western Cordillera

- Consists of 3 mountain ranges:
  - Coast
  - Columbia
  - Rocky
- Composed of folded sedimentary rock and metamorphic rock
- Geologically young;
  - About 65 – 100 million years old.
Differential erosion has shaped the plains or “prairies” into 4 regions:

- Alberta Plain
- Saskatchewan Plain
- Manitoba Lowlands
- Mackenzie Lowlands

Composed flat sedimentary rock

Once an ancient sea coast

Geologically old;

- About 1.8 – 1.9 billion years old.
Canadian Shield

- The largest landform in Canada, it is also one of the oldest.
  - Geologically stable (little change)
- Composed igneous and metamorphic rock
- Shaped by many periods of glaciation, scraping away rock to form lakes
- Bedrock is impervious to water
- Once a great mountain range, now eroded to present state
- Geologically very old;
  - About 2.7 billion years old.
Hudson Bay Lowlands

- A small, flat region. Bordering on the shore of the Hudson Bay
- Composed of sedimentary rock on top of Canadian Shield rock
- Shaped by erosion, glaciation and sedimentation
- Very swampy (base of shield rock = poor water drainage)
- Spent a great deal of time covered by glaciers
- Geologically very young;
  - About 10,000 years old (the end of the last period of glaciation).
Great Lakes / St. Lawrence Lowlands

- A small, hilly region. Defined by glaciation and the flow of water.
- Composed of sedimentary rock
- Shaped by erosion, glaciation and sedimentation
- Marked by lakes, rivers, ridges, escarpments, moraines and other landforms as a result of glaciation
- Niagara Escarpment
- Oakridges Moraine
- Geologically young;
  - About 100 million years old, though different features formed at different times
The Appalachian Mountains

- An older, eroded mountain region formed during the continental collide that made Pangaea
- Composed primarily of sedimentary rock, but some igneous and metamorphic rock can also be found in places
- Once tall, jagged mountains are now gentle slopes, eroded by weathering over millions of years and glaciation
- Geologically old;
  - About 440-480 million years old
The Arctic Lowlands

- A series of low-lying islands with gentle rolling slopes
- Composed primarily of sedimentary rock
- Similar in elevation to the Mackenzie Lowlands, with the addition of a rolling landscape and islands
- Once completely covered by glaciers
- Geologically young:
  - About 2 million years old
The Innuitian Region (Arctic Cordillera)

- A series of mountains in Canada’s far north
- Composed primarily of igneous and metamorphic rock with some sedimentary bedrock
- Similar in composition to the Appalachians, but younger, so erosion has not rounded these peaks
- Due to its remote and extremely harsh location, less is known about this region than any other in Canada
- Geologically middle-aged:
  - < 400 million years old
Canada is a diverse country with many landforms. Canada’s landforms are divided into ______ regions, each distinctly different in their own way. The _______________ ____________ is geologically young, only about _____________ years old. This means that the nation’s most spectacular peaks are here. In fact, the __________ ________ is home to ______ mountain ranges, the ______, __________ and the ______ _________. They are composed of _______________ and _______________ rock. These make other mountainous regions look small by comparison.

The ___________ ___________ are more than four times older at _______________ years old, and have been eroded down to highlands, from the tall _______________ they once were. These _____________ were once connected with the mountains in the highlands of the United Kingdom, when they were formed in the _______________ ___________ that made _______________.

While we know a great deal about these two mountain ranges, we know much less about the ______ _________ (also known as the ______ ___________). These _________ are so far ______ that it is difficult to study them and dangerous to go there (so ____ is ____ about them). These _________ are both taller and ______ than the ____________, but are ________ to them in composition. While we are not sure of their exact age, we estimate that they are younger than _______________ years old.
Unlike the Arctic Cordillera, the _______ _______ are relatively flat. They are a series of low-lying _______ that have gentle rolling _______, mostly composed of _______ _______. This region is geologically _______ (about _______ years old), and has been shaped by _______.

Similar to the _______ _______ are the _______ ___ _______. They, like the Arctic have been shaped by glaciation and until about _______ years ago, were covered by ____. This region is very swampy, due to poor _____ drainage because of _______ _______ rock as it’s base. This rock is not porous and does not let _____ through easily.

Another low-lying region in Canada is the _______ _____ _ ___ _______. This narrow band stretches from southern Ontario to just east of Quebec City, Quebec. This region, like other _________, has been shaped by ________, as well as _________ and _______________. Unlike other lowlands in Canada, this region is marked by _____, rivers, _______________ and __________. Much of the rock here is __________ and is geologically _______ at about ___ million years old.
The second last stop on our journey is the _______ _______, a relatively flat part of the country which is responsible for most of Canada’s grain production and more recently, has become well known for it’s oil and gas production. This is because this region was once an ancient ___ _______, where many creatures lived and died. Their remains are what make up the oil sands today. The region is subdivided into ____ regions, the Alberta and _______________ _____, and the ______ and Mackenzie _______. These regions are composed of flat, ___________ ____, which is estimated at about __________ billion years old.

Finally, we conclude with one of Canada’s greatest landforms (though it’s pretty hard to see), the ___________ _______. The ___________ _______ is a massive and ancient _______ _______ that has been _______ down to it’s present state by _______ and other forces (very little is visible from the air). Geologically speaking, it’s very old, at about _____________ years old –over half as old as the Earth itself! It’s composed of ___________ and ___________ rock and has undergone very little change.