

# Natural Hazards

Read Page 130-135 in the Perspectives Text and answer the following questions.

1. Complete the following diagram:

Natural Hazard	How it develops	Region(s) they occur and most severe (fig3.13a)
Tornadoes	when two extreme air masses meet (warm humid air from the Gulf of Mexico and the cool dry air of Central Canada).	Prairies and St. Lawrence Valley,
Earthquakes	earth's tectonic plates collide or grind past one another,	Canada's west coast is most vulnerable and unstable; smaller quakes occur in eastern Canada
Hailstorms	strong updrafts carry water into the high subzero layers of the clouds-the ice pellets form	Calgary most severe
Hurricanes	low pressure systems form over warm oceans where they gather their energy	the Maritimes often get the tail end of most hurricanes;
Floods	when the water levels rise and spill over the banks of rivers and lakes; can occur when snow and ice melts too quickly in the spring	Can occur anywhere in Canada, particularly along rivers.
Wildfires	lightning bolts and careless campers; a spark in dry grass can spread rapidly	Anywhere in Canada that is south of the tree line; BC and the Boreal forest in Central Ontario
Tsunamis	if an earthquake occurs in an ocean, the shock waves results in a large tidal wave	West coast of BC and Atlantic coast
Landslides	gravity causes mud rock and snow to slip on steep slopes	common in Western Cordillera
Winter Storms	Snow and more importantly freezing rain	anywhere in Canada

2. When is the peak season for tornadoes? (June and July)

3. a. What are some of the problems that occur due to a drought? (Drying crops, dropping water tables, and fires)

- b. What regions in Canada are most at risk of drought conditions?  
(Prairies)
4. Explain the difference between the flood that occurred in Winnipeg 1997 and the one that occurred in the Saguenay region 1996.  
(The Red River from South to North and in 1997 the snow in the south melted quickly and flooded as ice dammed the northern side of the river valley causing the flooding of 2000 km<sup>2</sup>. Whereas a cyclonic storm stalled for 28 hours over the Saguenay River dropping a lot of rain. The water accumulated behind the Lac Ha!Ha! Reservoir and when the eastern dike gave out the region was flooded)
5. a. List five ways the 1998 ice storm caused immediate problems.  
(Driving and walking conditions were poor; trees snapped; roofs caved in; hydro lines snapped)
- b. How did the ice cause problems after the storm had passed?  
(Millions of people were left in darkness for days in some cases weeks after the ice storm)
6. a. Why is it important to be able to anticipate natural hazards?  
(People can prepare)
- b. How can people be warned?  
(Telecommunications-warning alerts broadcast over the radio and tv)