$\qquad$
Date: $\qquad$

## Finding My Direction

Total: $\qquad$ $/ 26$

Direction is the term we use to describe "the manner in which we are heading". Simply put, without some form of standard direction, we would never know where we are or where we are going, and more importantly maps would be useless.

The most basic form of direction is indicated by the directions North, South, East and West. These directions are universal and used on all forms of maps. The most common way of indicating these directions is with a compass rose, and most maps will have a compass rose that indicate North, South, East and West. Compass rose directions often include mid-point directions such as Northeast or Southwest.

Directions: Answer the following questions and colour and label the map of Canada provided as directed.


1. Complete each sentence by indicating their proper direction according to the compass rose. Use the compass rose provided on the bottom left hand corner of your Canada map provided to help you. The first one has been done for you.
a. Vancouver is $\qquad$ of Edmonton.
b. The Pacific Ocean is $\qquad$ of Hudson Bay
c. The island of Newfoundland is $\qquad$ of Labrador
d. Calgary is $\qquad$ of Edmonton
e. Nunavet is $\qquad$ of Alberta

f. Ontario is $\qquad$ of the North West Territories.

Specific directions on a map can be pinpointed on a map using latitude and longitude. Latitude and longitude are two ways in which the earth has been divided. Latitude are lines that are placed on a map that go from east to west. Lines of latitude and longitude are measured in degrees. Degree are indicated by a " 0 " such as $49^{\circ}$ latitude.


Longitude are lines that are placed on a map that go from Line of Latitude north to south.

When latitude and longitude lines are put together they form a grid pattern on a map or a globe.


Lines of Latitude and Longitude on a globe

## Latitude and Longitude

There must be a starting point for both the lines of latitude and the lines of longitude. Lines of latitude are measured either north or south of the equator. The equator divides the earth into a north and south hemispheres. We divide latitude into $90^{\circ}$ (degrees) north or $90^{\circ}$ south of the equator. For example the border between western Canada and the western United States is $49^{\circ}$ north. The North Pole would be $90^{\circ}$ north.

The starting point for longitude is the Prime Meridian and it runs north to south through Greenwich, England in Great Britain. There are $360^{\circ}$ (degrees) of longitude. Because standard time is divided into 24 hours, if you were to divide 24 hours into $360^{\circ}$ you would get 15 . That means that for every $15^{\circ}$ that the sun travels around the earth from east to west, it equates to 1 hour.

When we list a specific location on a map or use a GPS (Global Positioning Satellite) location we always label it as so many degrees north or south and then so many degrees east and west. For example, if we were to locate the city of Vancouver using latitude and longitude we would describe it as approximately $49^{\circ}$ North and $123^{\circ}$ West. This means that the city of Vancouver is located $49^{\circ}$ north of the equator and $123^{\circ}$ west of the Prime Meridian.

Directions: Use the following map to complete the chart provided.


| Place |  | Latitude | Longitude |
| :--- | :--- | :--- | :--- |
|  | 1 | $83^{\circ} \mathrm{N}$ | $63^{\circ} \mathrm{W}$ |
| Halifax | 2 | - | $63^{\circ} \mathrm{W}$ |
| Ottawa | 3 | - | - |
| Prince Rupert | 4 | $54^{\circ} \mathrm{N}$ | - |
|  | 5 | $48^{\circ} \mathrm{N}$ | $53^{\circ} \mathrm{W}$ |
| Vancouver | 6 | - | $123^{\circ} \mathrm{W}$ |
|  | 7 | $62^{\circ} \mathrm{N}$ | $114^{\circ} \mathrm{W}$ |
|  | 8 | $61^{\circ} \mathrm{N}$ | $135^{\circ} \mathrm{W}$ |
|  | 9 | $42^{\circ} \mathrm{N}$ | $83^{\circ} \mathrm{W}$ |
| Winnipeg | 10 | - | $97^{\circ} \mathrm{W}$ |



Directions: Colour the following map of Canada (10 marks for quality of work)


