The Location Station!
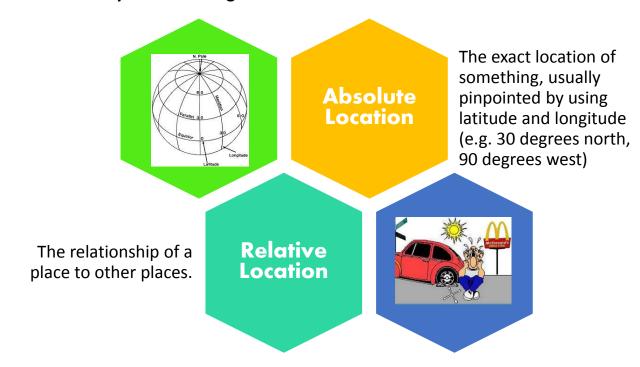
> The theme of location answers the question:
> ***Where is it?***

Location refers to the position on the Earth's surface.

There are TWO ways of describing location:

Absolute Location

The exact location of something, usually pinpointed by using latitude and longitude (e.g. 30 degrees north, 90 degrees west)

Relative Location

The relationship of a place to other places.

Task 1: Review

1. Absolute location activity (see handout).
2. Describe the relative location of Burns Lake in a way that a person on another continent could find it easily on a map – without reference to latitude and longitude.

Location: Global Positioning System

Chances are you have probably used GPS before if you've used Google Maps on your phone/computer, or maybe a GPS in your car. The global positioning system (GPS) is a network of satellites and receiving devices used to determine the location of something on Earth. Some GPS receivers are so accurate they can establish their location within 1 centimeter (0.4 inches). GPS receivers provide location in latitude, longitude, and altitude. They also provide the accurate time.

GPS includes 24 satellites that circle Earth in precise orbits. Each satellite makes a full orbit of Earth every 12 hours. These satellites are constantly sending out radio signals.

Aircraft, ships, submarines, trains, and the space shuttle all use GPS to navigate. Many people use receivers when driving cars. The GPS receiver plots the car's constantly-changing location on an electronic map. The map provides directions to the person's destination. Both the location and the vehicle are plotted using satellite data. Some hikers use GPS to help them find their way, especially when they are not on marked trails.

Task 2:

Watch this video: ***Trax Next Generation GPS Tracker for Children and Pets*** https://www.youtube.com/watch?v=1PkMT2RyO3A

And read the article excerpt: ***"You're Being Followed"***

Answer the following questions:

1. What are some of the benefits of the Trax GPS product? Drawbacks?
2. Would you ever use something like this? Why/why not?
3. Do you think it is an infringement on personal privacy for people to be able to track other people? Give reasons/evidence to support your opinion.