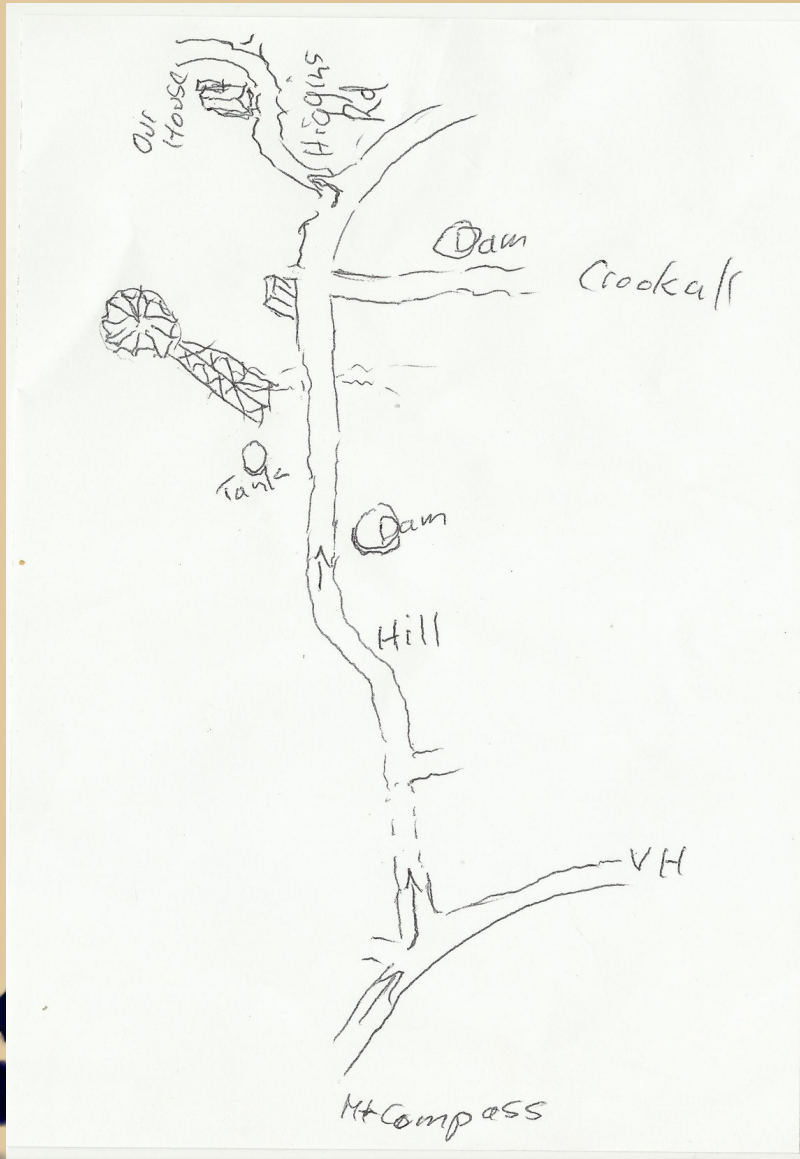# Maps & the Computer

Maps

- **represent the earth's surface**
- **position us**
- **claim home soil**
- **are projections**

OSM is a collaborative project to create a free editable map of the world.
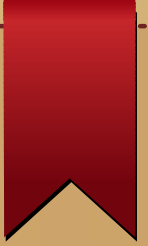
Open Source Mapping

OpenStreetMap

Who wants to edit a map?

Working from the web page **openstreetmap.org**, you get a map with full features. When you download an app to your device, you get a map with specific functions - computer: **maps** (openstreetmap-client)**, gpxviewer, josm, osmosis** - smartphone: **location map viewer, herewego** (can be used offline).

.GPX Files

Global positioning

Satellites are the trig-points

Map-makers carry hand-held electronic devices that pick up their signals.

They record way-points.

.OSM File

XML file created in the OpenStreetMap (OSM) format, which is used for saving street map information; saves data in the form of "nodes" (points), "ways" (connections), and "relations" (street and object properties, such as tags).

OSM maintains a freely available file named Planet.osm.

Planet.osm is the OpenStreetMap data in one file: all the nodes, ways and relations that make up our map. A new version is released every week. It's a big file (XML variant over 739.7GB uncompressed, 53.1GB bz2 compressed and 33.6GB PBF at 29/11/2016).