FORM 4 GEOGRAPHY NOTE 2

DISTANCE / SCALE

Distance is the length of space between two points.

(Koe distance koe vamama'o 'o ha vaha'a ha ongo fo'i poini 'e 2)

Scale is the relationship between distance on the map and distance on the ground.

(Ko e scale ko e fekainga'aki e mama'o 'i ha mape moe mama'o 'i he kelekele mo'oni)

Remember the features on a map is different from the actual size of features on Earth. So a scale is used to resize the real features on Earth onto a map.

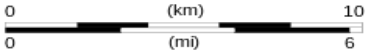
(Manatu'i ko e ngaahi me'a 'oku ha 'i ha mape 'oku 'ikai ke lahi tatau ia moe ngaahi me'a 'oku 'i he mamani 'oku tau nofo ai. 'A ia 'oku nguae'aki e scale ke holoki e saisi 'o ha me'a 'i mamani ke malava 'o ta ki ha mape)

3 TYPES OF SCALE

1. LINEAR / GRAPH
2. FRACTIONAL / RATIO
3. VERBAL / WORD

LINEAR/ GRAPH SCALE

- It shows the distance between two or more places or features on a map.
- It shows on maps a set of lines or dots that represents an area or feature.

Example: 

FRACTIONAL/ RATIO SCALE

- It shows the fraction of an object or land feature on the map.
- This type uses a set of numbers that represents the object or feature.

Example: 1: 1,200

VERBAL/ WORD SCALE

- This type of scale use simple words to describe a prominent surface feature.
- It expands abbreviations to describe a feature or an object.

Example: 1:1,200 in words is that one cm on the map represents one thousand and two hundred centimeters on the ground (Earth)

Measuring distances

Steps to measuring distance on a map

1. Use a ruler or piece of paper to measure the distance between the two places. If the line that you're trying to measure is quite curved, use a string to determine the distance, and then measure the string.

2. Find the scale for the map you're going to use. They are typically located in one of the corners of the map.

Linear scale. Use this scale to measure the distance from one town to another.

For example: Nanjing to Shanghai.

The distance from Nanjing to Shanghai is about 200km

- Use these links to have better knowledge on how to measure distance on a map.
- Ngaue'aki e ngaahi vitioo ko 'ena 'oku ha 'i lalo ke ke mahino'i ange ai e anga e fua 'o ha vamama'o ha ongo feitu'u pe me'a 'i ha mape.

  https://www.youtube.com/watch?v=ZEWH58yMsAQ
  https://www.youtube.com/watch?v=xy8AwA3qSB0
  https://www.youtube.com/watch?v=dTriKKOsqyI

IMPORTANCE OF USING SCALE

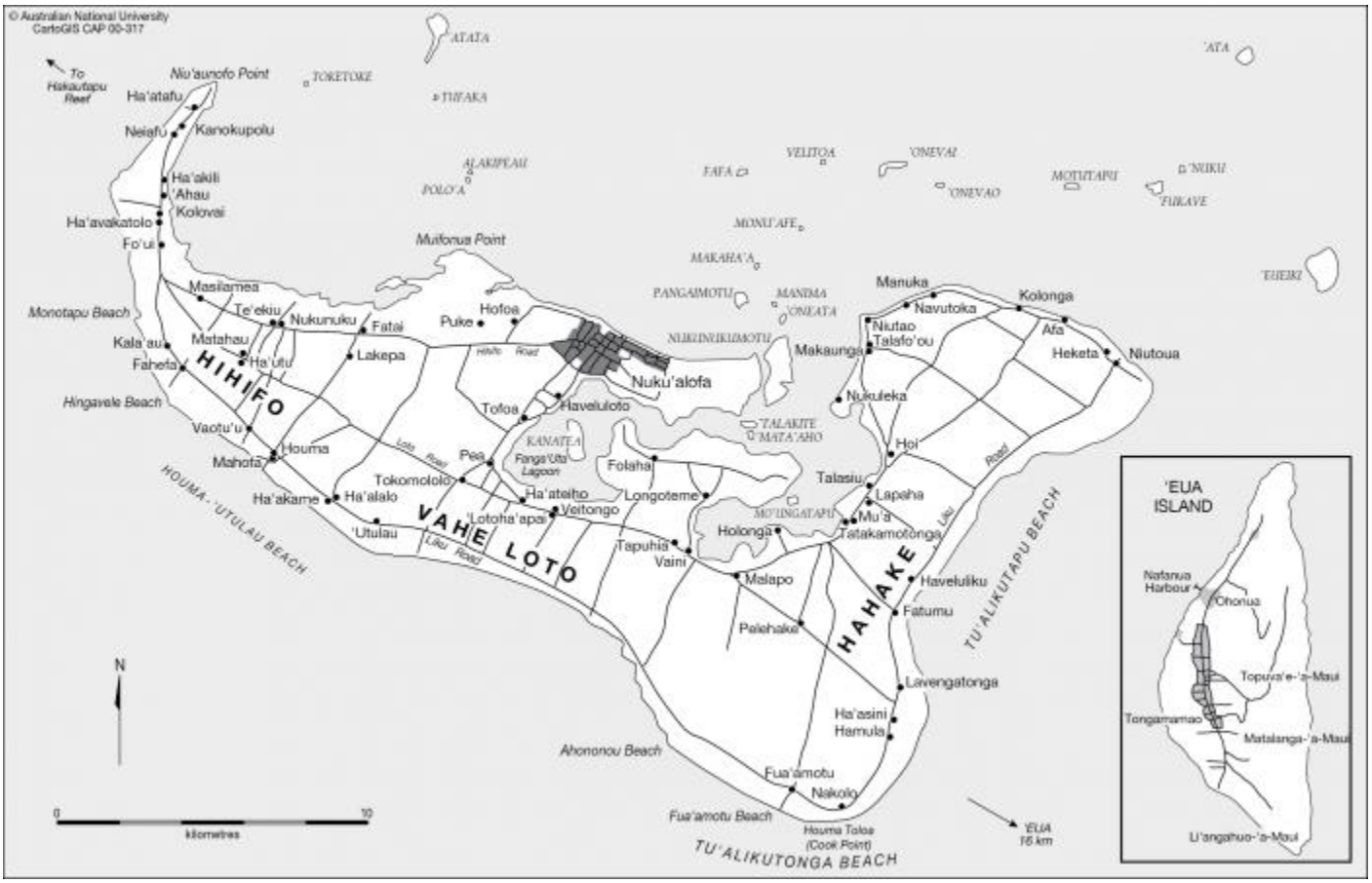
- They are highly important for providing a sense of size and distance to readers. One is able to easily measure distance with the help of a linear scale
- A map cannot be drawn and is incomplete without a scale.
- Scale is important for determining the length, width, etc., of any region.

ACTIVITY 1: Answer the following questions using the notes provided. (*Ngaue'aki e nouti ke tali 'aki e ngaahi fehu'i 'oku tuku atu)*

1. Using your own words define:
   i. Distance
   ii. Scale

2. Name the 3 types of scale.
3. Describe each type of scale, use the points provided in the notes to form your description of the 3 scale types. (Fakamatala'i mai e scale e 3. Ngaue'aki e ngaahi poini 'oku ha atu he nouti ke ke fa'u 'aki ho fakamatala ki he scale 'e 3)
4. Explain the importance of using scale on maps. Use the points in the notes or your own understanding to form an explanation on the importance of using scale.(Fakamatala'i mai e mahu'inga e ngaue'aki e ngaahi me'afua 'i he mape. Ngaue'aki e ngaahi poini 'oku 'oatu he nouti pe ko ho'o mahino'i e mahu'inga e scale)

ACTIVITY 2: MEASURING DISTANCE USING LINEAR SCALE. Use the two mapsbelow to measure and estimate distances between points. (*Ngaue'aki e mape 'oku ha atu 'i lalo ke ke fua mo fakafuofua'i 'aki e ngaahi vamama'o ha 'u poini)*



Read the map carefully. Use the road when you are measuring town to town. Do not measure towns crossing through the sea. (Lau fakalelei e mape. Ngaue'aki e hala ki ho fua e kolo ki he kolo. 'Oua na'a ke fua ha kolo ki ha kolo ho lele he loto tahi)

1. Fu'amotu to Pelehake
2. Puke to Hofoa
3. Navutoka to Niutoua
4. Fatai to Houma
5. Veitongo to Malapo
6. 'Utulau to Kala'au
7. Kolonga to Afaa
8. Lapaha to Fatumu
9. Folaha to Longoteme
10. Ha'atafu to Fo'u

You do not need to use the roads when measuring town to town. (Fua hangatonu pe ‘a e ngaahi kolo)

1. Canterbury Racecourse to Randwick Racecourse
2. Sydney Airport to the Football Stadium
3. Drummoyne to Ashfield
4. Maroubra to Coogee
5. Taronga Zoological Park to the Opera House
6. Blakehurst to Hurstville
7. Biocentennial Park to Univ. of Sydney
8. Botany Bay National Park to Astrolabe Park