YEAR 7/8

GEOGRAPHY

Week 6 Workbook

MISS NOTT

Lesson 1: Skills (AR and GR)

In class, we have been looking at the following skills.

This week, we are going to review these skills and complete some practice to make sure we completely understand everything.

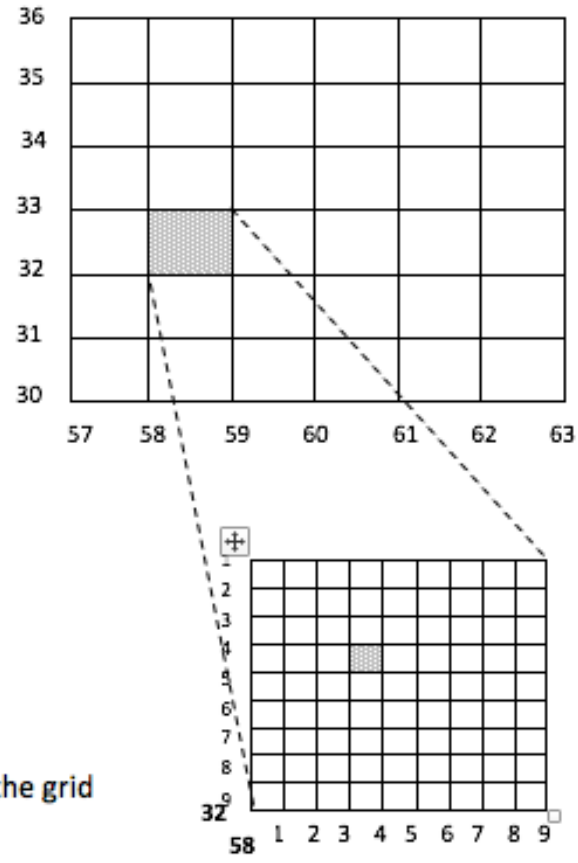
This lesson will focus on:

- Topographic Maps
- Area and Grid Reference

Four Figure Area/Grid Reference:

Video Review: How to use four figure grid references (UPDATED)

https://www.youtube.com/watch?v=EwH2YAhHUS8



the grid

To locate a point on a map using four figure grid reference:

STEP 1:
"You have to crawl before you can walk."
Read along the horizontal line of numbers (*eastings)*
Stop at the box to the left of the one you are looking for.
So, on the map to the left, the first two numbers would be:

58

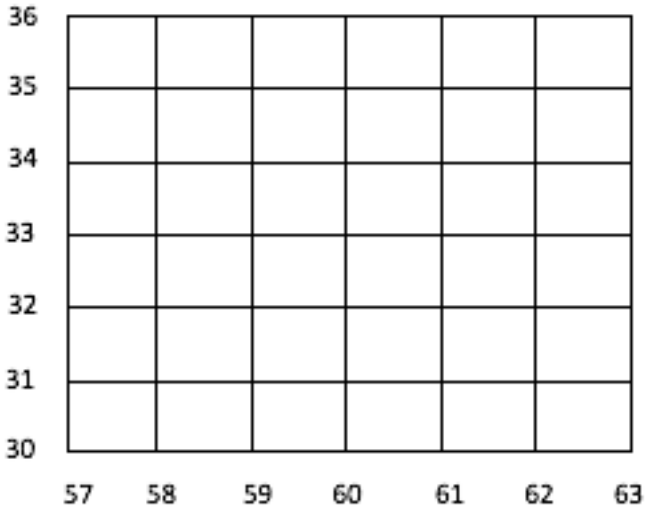
STEP 2:
Read along the vertical lines (*northings).*
Stop at the bottom of the one you are looking for.
So, on the map to the left, the second two numbers would be:

32

So, the AREA REFERENCE is: 5832

Your turn:

Add the letters in the correct place on the grid below:



A – 5833

B – 6131

C – 5730

D – 5931

E – 6132

Write the four-figure grid references for the squares labelled below:

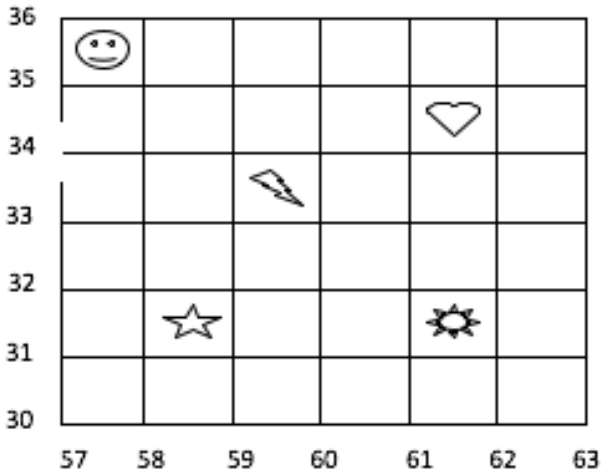
_____

_____

_____

_____

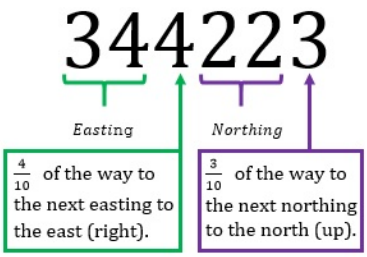
_____



Six Figure Grid Reference:

Video Review: How to use six figure grid references (UPDATED)

https://www.youtube.com/watch?v=AVjfZzzgXWg



Six figure grid references start the same way as four figure, so…

Step 1:

"You have to crawl before you can walk."

Read along the horizontal line of numbers (*eastings)*

Stop at the box to the left.

So, in this example:

32

Step 2:

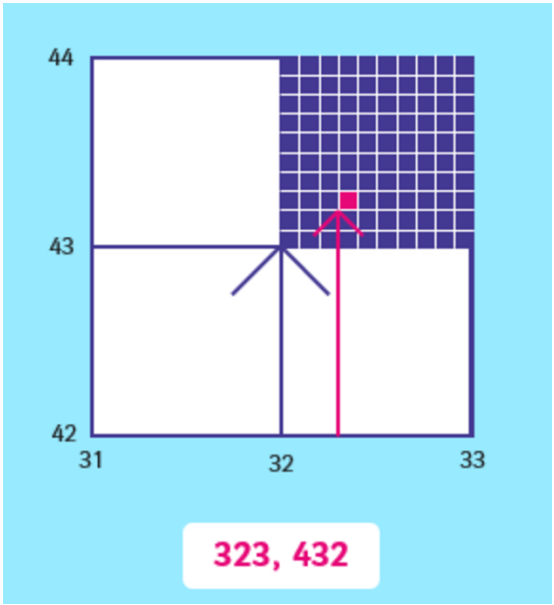
Imagine that the box is divided up into 10 equal sections, like the example to the right.

Work out how far along the easting the point is.

So, in this example, it's about 3/10 of the way across.

Therefore, the first 3 numbers are:

323

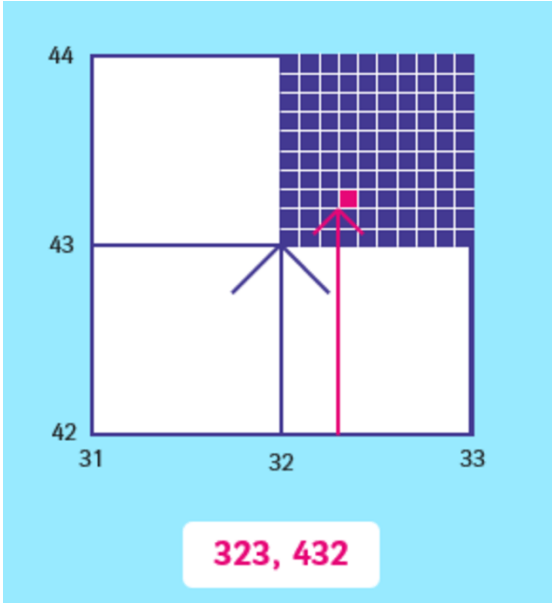


Step 3:

Read along the vertical lines (*northings).*
Stop at the bottom of the one you are looking for.

So, in this example:

43



Step 4:

Imagine that the box is divided up into 10 equal sections, like the example to the right.

Figure out how far up the northing the point is.

So, in this example, it's about 2/10 up

Therefore, the last 3 numbers are:

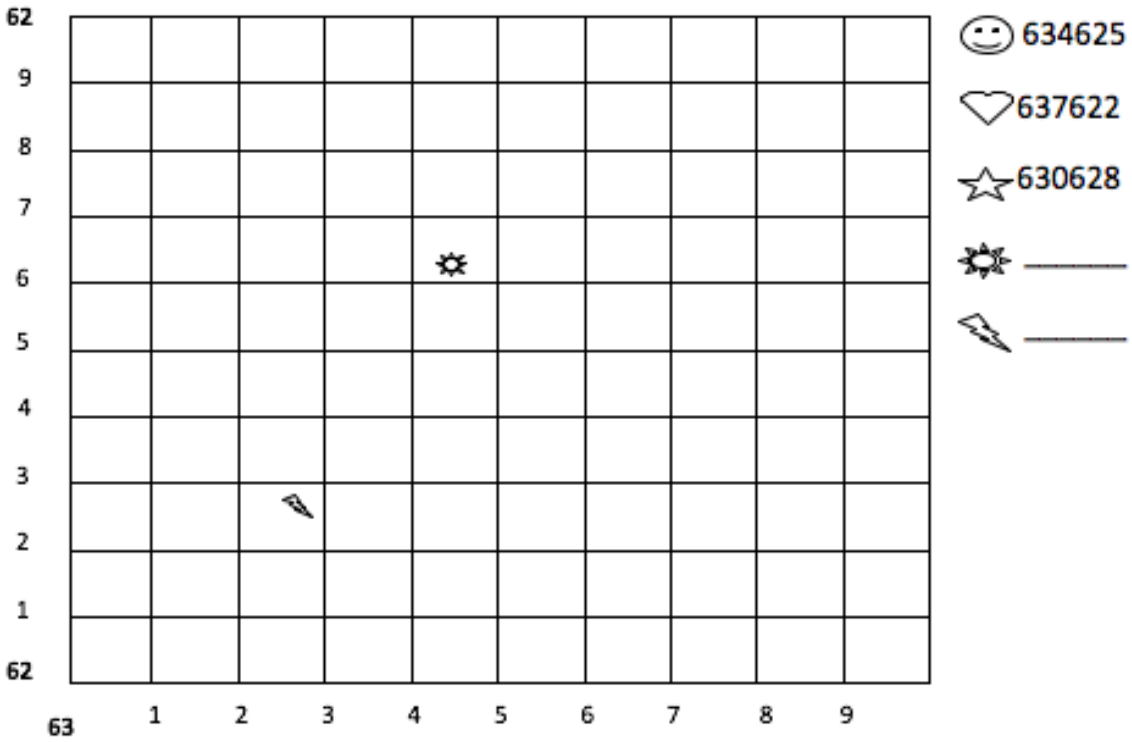
432

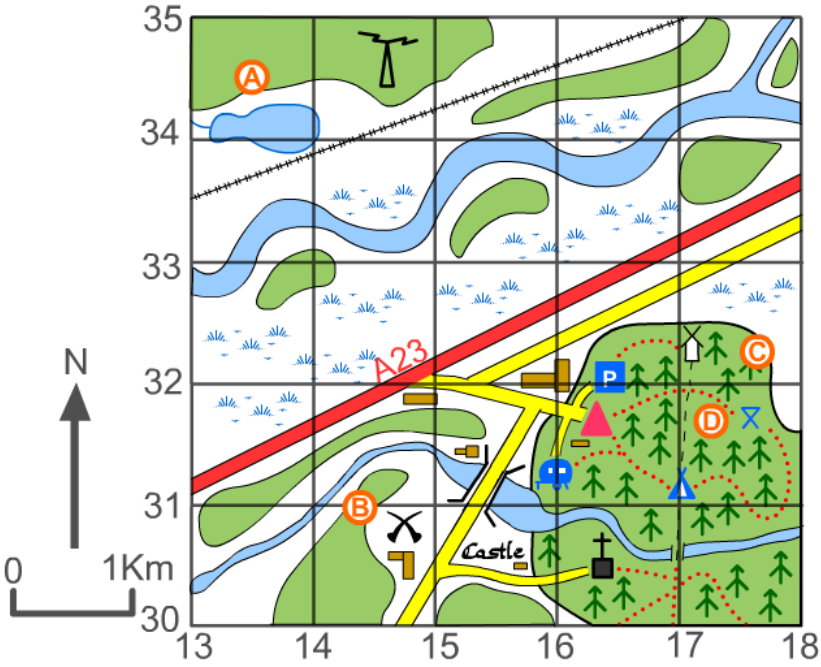
The 6-figure grid reference in this example is:

323 432

Your turn:

Write down the six-figure grid reference for the points below and add the correct shapes to their points:





Give the 6 figure grid references for:

A) _____

B) _____

C) _____

D)_____

Give the 6-figure grid reference for:

The youth hostel (red triangle)

_____

The castle_____

The church ( ) _____

Lesson 2: Water Availability

Using a dictionary or the internet, define the following two terms:

Availability:

_____

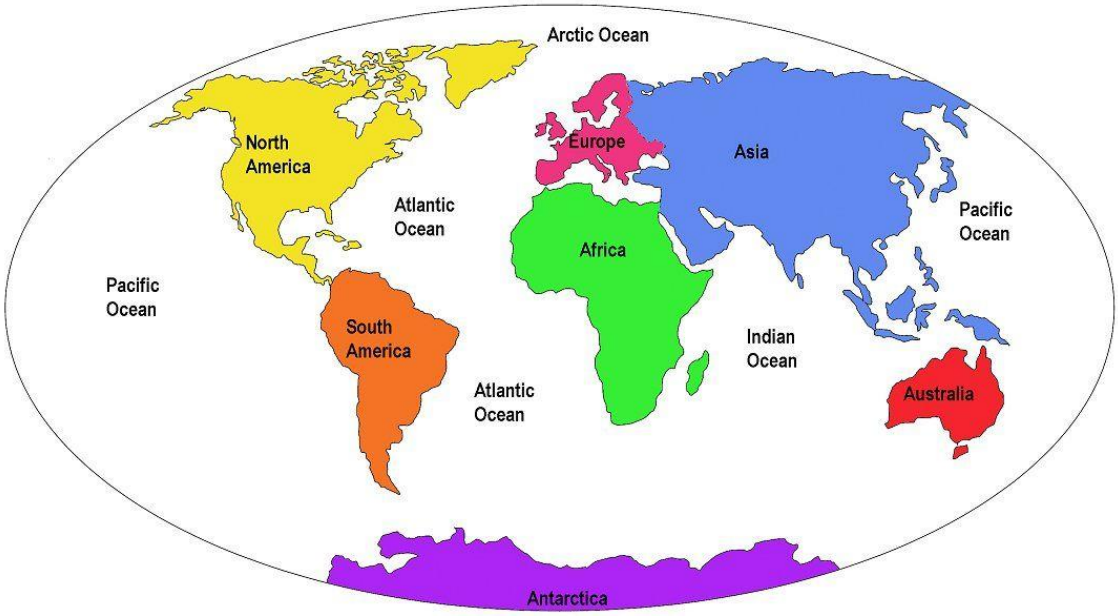
_____

Scarcity:

_____

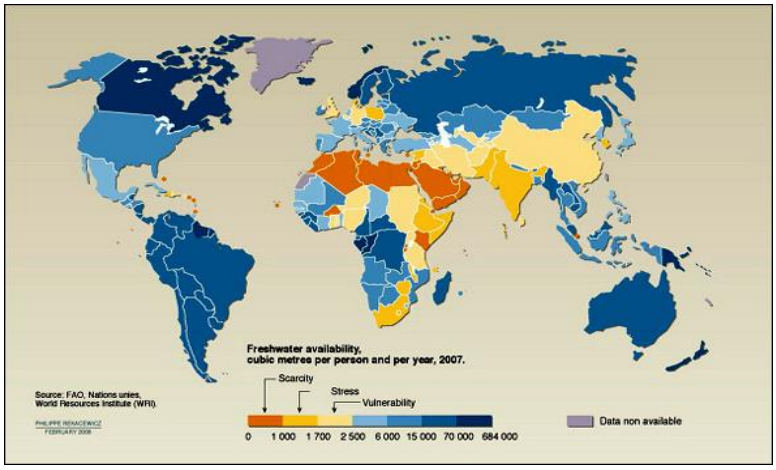
_____

Map of continents – for next activity:



Look at the following diagrams:

Diagram 1



Is the distribution of water around the world fair, or not fair? How do you know?

_____

Which continents have the most water?

_____

Which ones have the least?

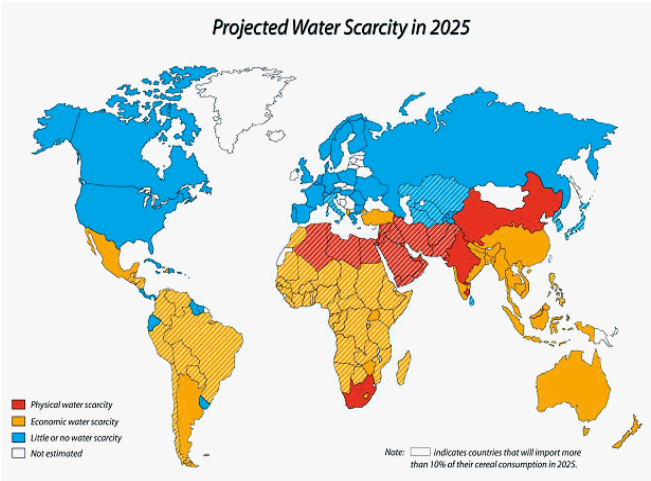
_____

What was Australia's availability in 2007?

_____

Diagram 2:

*This diagram is about **projected water scarcity.** So this means scientists and geographers are using data to **predict** what the world might look like in 2025.*



Which continents will have the most water in 2025 (blue)

_____

Which ones will have the least? (Red, Yellow)

_____

You will notice Australia was blue in the last map, and yellow on this one. Provide 2 possible reasons for the change:

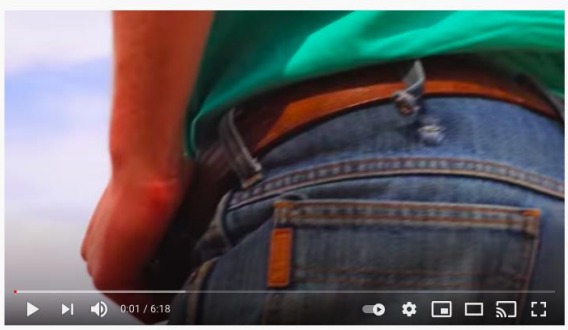
_____

_____

Case Study: Drought in Australia

If you have access to YouTube, watch the following clip:

https://www.youtube.com/watch?v=SzXxYiloUsg



DAY ZERO | The Australian Drought Crisis

Use this clip to answer the following questions:

1. What caused this drought?

_____
_____
_____

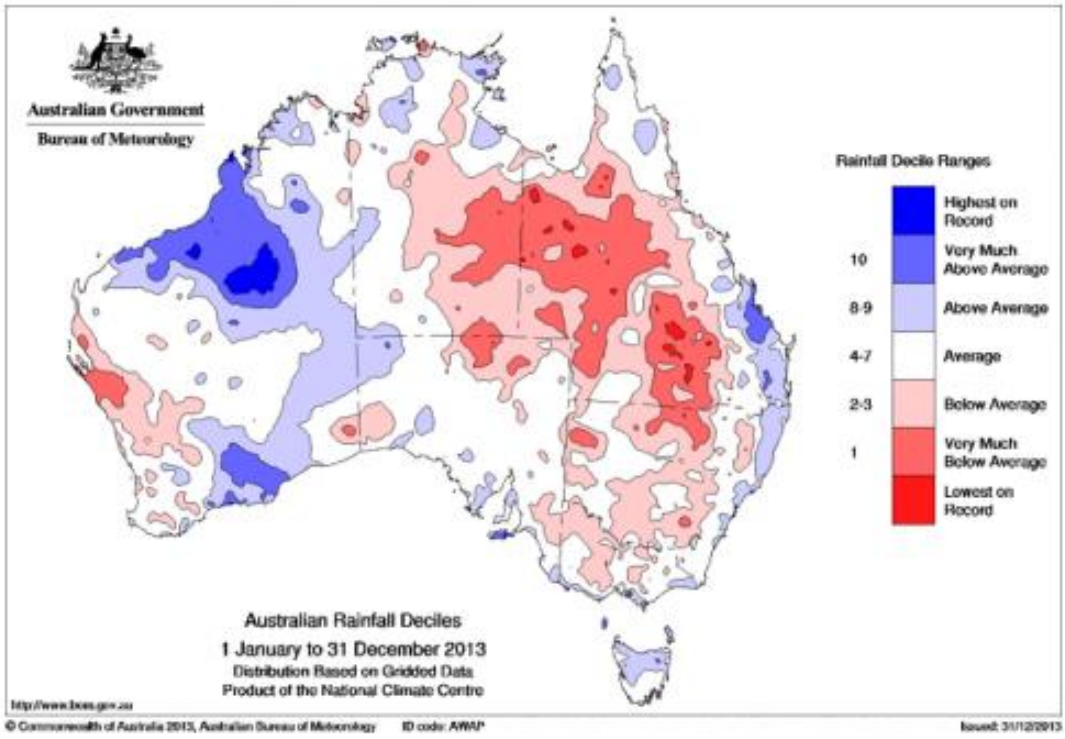
2. Outline any social, environmental and/or economic impacts of the 2019 drought on Australians.

_____
_____
_____
_____
_____
_____

3. What do you think should be done to help support people impacted by natural disasters, such as this drought?

_____
_____
_____
_____
_____
_____
_____
_____

Look closely at the following charts from the Bureau of Meteorology and use them to answer the questions below:



1.Which Australian state experienced the least rainfall last year?

_____

2. Which months were the driest in Australia?

_____

3. Is every Australian state in drought?

_____

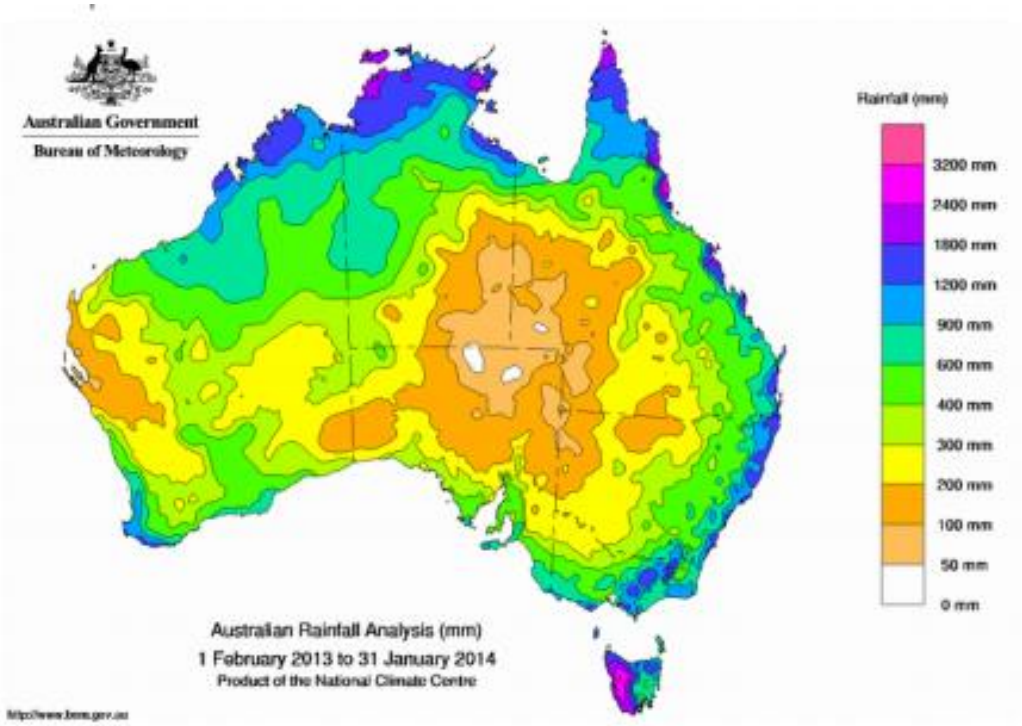
4. Which states appear to have areas experiencing drought?

_____

5. How does Australia's rainfall last year compare to the average total in the years between 1961 and 1990.

_____

_____



1.Which areas experience the highest amount of rainfall?

_____

2. Which areas experience the lowest?

_____

3. Find Manilla on the map. How much rainfall does it get, on average?

_____

Lesson 3: Skills (BOLTSS and Topographic Maps)

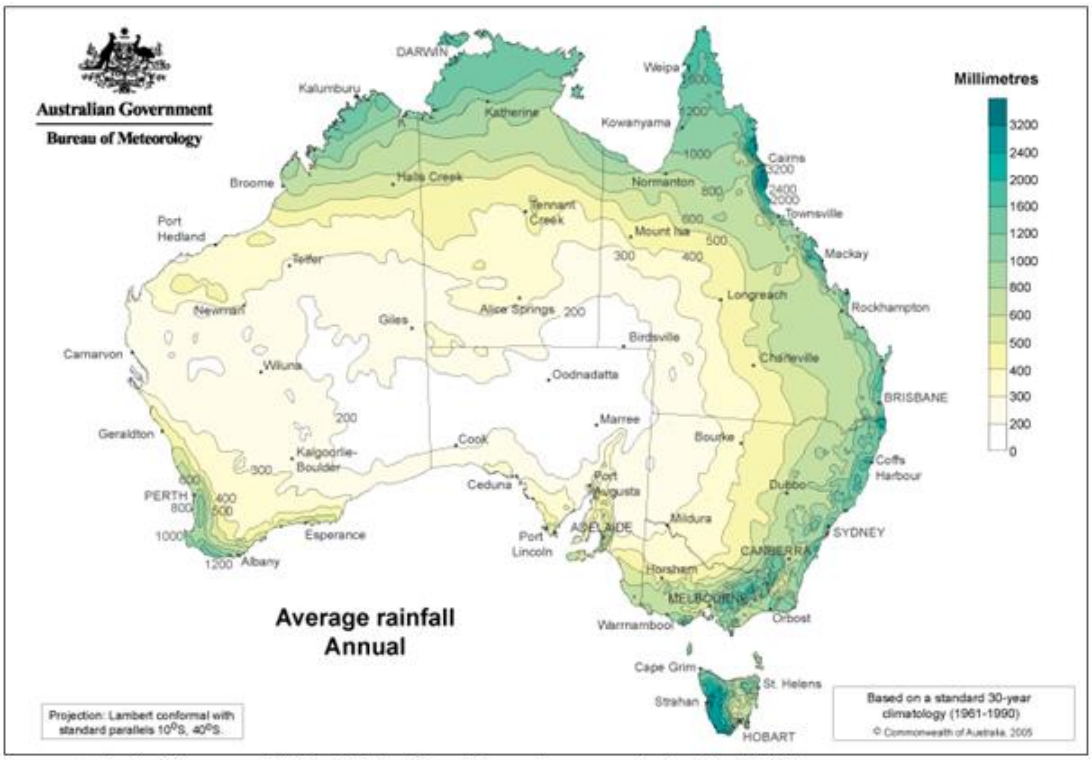
We have started to look at this in class.

In geography, we have been looking at how we label our maps.

We have been using BOLTSS.

B: Border
O: Orientation (North, South, East, West)
L: Legend or Key
T: Title
S: Scale
S: Source (Where did the map come from)

Use BOLTSS to label the map below:



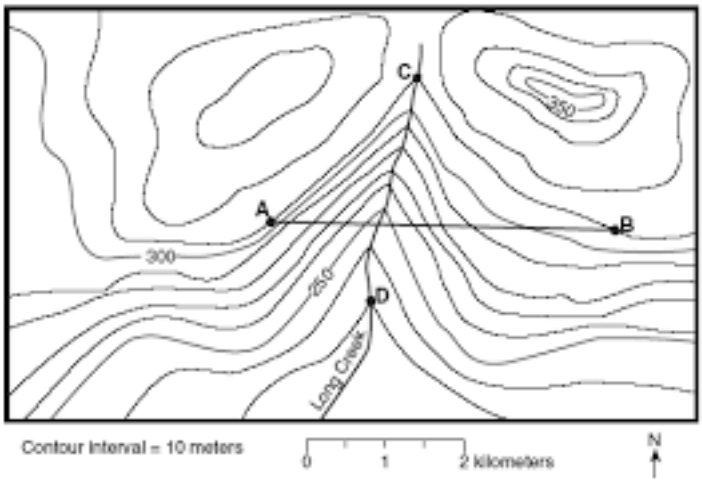
Source: Australian Government National Water Commision, water.gov.au last updated 2007

Topographic maps are detailed, accurate graphic representations of features that appear on the Earth's surface.

Video Review: What is a contour (topographic) map?

https://www.youtube.com/watch?v=EwH2YAhHUS8

When reading a topographic map, we look for:



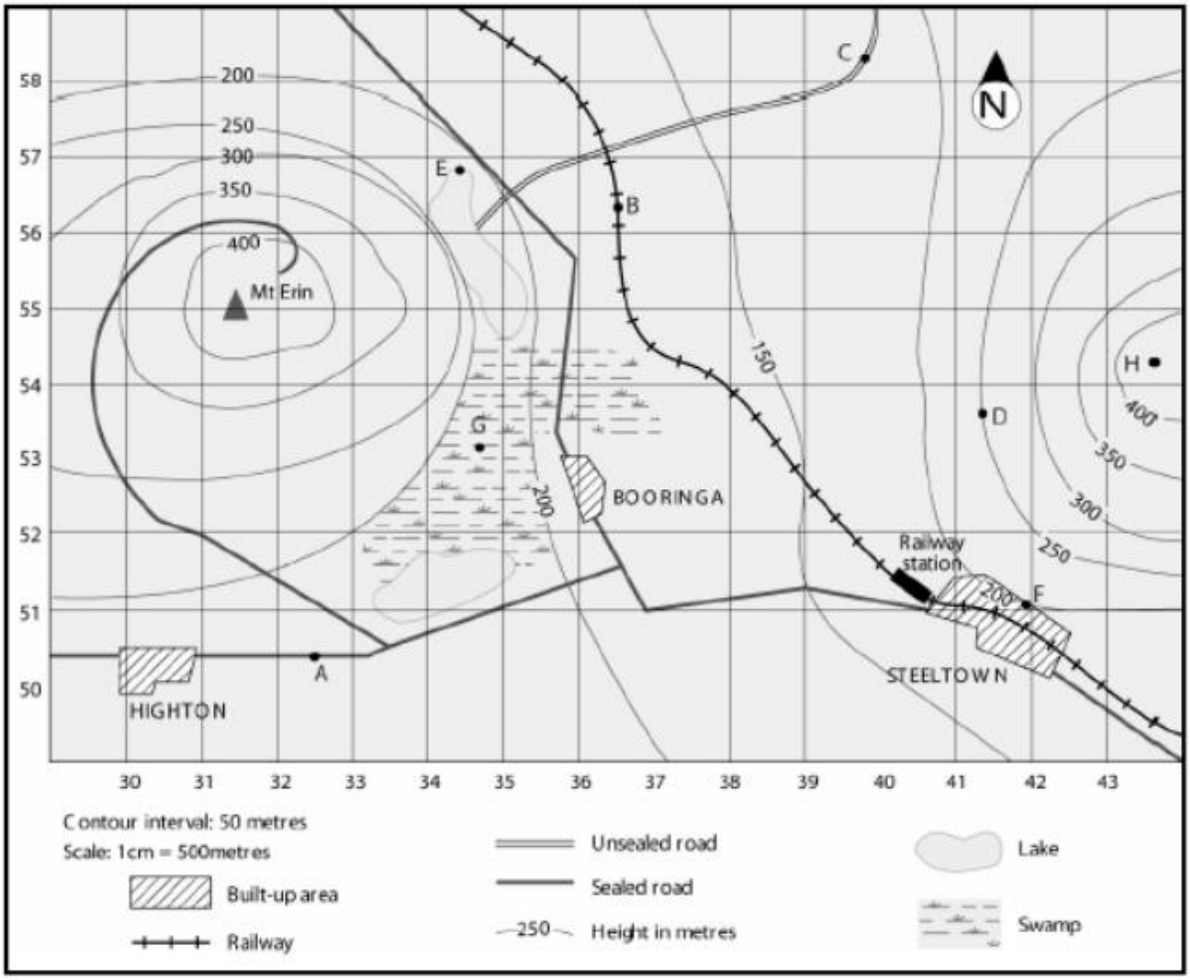
Map legend/key:
Use the legend to identify features on the ground – there are symbols for things like roads, tracks, lakes, powerlines, fences.

Relief shading:
This shading helps you visualise mountains, hills and valleys – the heavier the shading, the steeper the slope.

Contour lines:
Use contour lines to determine elevations of mountains and flat areas. The closer together the lines are, the steeper the slope.

Colour:
Blue is typically used for water features, black for culture and green for vegetation

AR/GR skills: See lesson 1 ☺



1. How much higher is the land at point D than at point F? How do you know?

.....

.....

2. How do you know that Mt Erin is more than 350 m above sea level?

.....

.....

3.

(a) If you walked from the railway station to Mt Erin, how many metres would you have climbed?

.....

(b) Which part would be the flattest section of your journey to Mt Erin?

.....

4. At what area reference does the unsealed road and railway line intersect?

.....

5. (a) Which is the steepest face of Mt Erin — its northern or southern face?

.....

(b) How do you know?

.....

6. Which is the highest town above sea level — Highton, Booringa or Steeltown? Explain how you know?

.....

.....

.....

7. What map points are located at the following ARs?

(a) 3250

.....

(b) 4251

.....

(c) 3958

.....

(d) 3656

.....

8. In which direction would you travel to reach point D from: (a) point C?

.....

(b) point G?

.....

(c) point H?

.....

(d) point F?

.....

9. Using the map key or legend, write down what exists at:

(a) point A

.....

(b) point G

.....

(c) point E

.....

(d) point F

.....

10. What is the height of the land at the following points? (a) point B

.....

(b) point D

.....

(c) point H

.....

(d) point E

.....

Lesson 4: (Water Availability Cont.)

Read the information below, and complete the questions at the bottom.

Does everyone have enough water?

The human right to water

Access to water is a human right that is protected by many international agreements, yet not everyone has access to this life-giving resource. Everyone has the right to enough safe, accessible and affordable water for all their needs. Water is more important to survival than food. In hot conditions, a person can survive up to three weeks without food but only two or three days without water.

Water scarcity and management 285 People need access to improved drinking water, yet over 880 million people use unclean drinking water. Water is also needed to cook food, to bathe, to wash dishes and clothes, and to flush toilets. However, with the global population increasing and a fixed amount of water on Earth, some regions are suffering water scarcity. Water scarcity occurs when the demand for water is greater than the available supply. Ideally, each individual needs one cubic metre (1000 litres) of drinking water per year, about 100 cubic metres for other personal needs, and 1000 cubic metres to grow all the food that he or she consumes. Water stress occurs when there is not enough water available for all demands. A country with less than 1000 cubic metres of renewable fresh water per capita (per person) is under water stress

Around 1.1 billion people have inadequate access to water. A major reason for this scarcity is the difference between where people live and where rain falls. Other reasons include water being used for agriculture and industry in regions where it is dry, and water being so polluted it cannot be used. By 2025, it is estimated that two billion people will be living in regions where there is not enough water. The problem of lack of water is often worse in rural areas, so many people move from the countryside into towns and cities, hoping for a better water supply. These people are sometimes called water refugees. However, the water in some cities is also inadequate because it is in short supply or is very polluted.

The water carriers

People who do not have water at home have to travel to get water. Water is very heavy and difficult to carry. The burden of this water-fetching usually falls on women, who carry the heavy load on their head or back. For some people, the trip to a water supply and back can take hours each day. The average distance that women in Africa and Asia walk to collect water is six kilometres. The average weight they carry on their

FIGURE 4 Women bear the burden of collecting water.

heads is about 20 kilograms — the usual weight of a suitcase taken on a fight. The World Health Organization estimates that over 40 billion work hours are lost each year in Africa alone, just collecting drinking water.

Quetsions:

1. Why is access to water a human right?

_____

2. Define the terms *water scarcity* and *water stress.*

_____

_____

_____

_____

3. Explain the difference between improved and unimproved water supplies.

_____

_____

_____

4. Describe the impact on a country if it is under water stress or water scarcity.

_____

_____

_____

5. What might be meant by the term *water refugee?*

_____

_____

_____

_____

6. Use research to come up with 5 or 6 main **reasons for water scarcity.** Express this information in a mind map below:

Extension

FIND-A-WORD

R	N	D	N	O	I	T	A	R	O	P	A	V	E	X	V
P	W	E	O	D	R	O	U	I	H	A	Z	A	R	I	Z
R	F	A	I	L	A	K	E	E	K	A	Q	C	R	Y	W
E	D	Y	T	G	R	A	E	W	A	T	E	T	T	A	L
C	R	G	A	E	I	S	O	B	A	R	U	I	T	G	N
I	A	O	G	U	R	E	D	Z	A	A	C	R	K	R	O
P	Z	L	I	S	Q	C	T	O	L	R	P	E	I	O	I
I	A	O	R	E	U	J	Y	W	A	G	G	V	O	U	T
T	H	R	R	O	D	G	A	C	L	P	E	A	O	N	A
A	L	O	I	S	I	T	S	L	L	R	H	P	R	D	N
T	A	E	I	I	E	R	A	N	B	E	P	E	P	W	I
I	R	T	U	R	E	F	M	J	S	V	F	N	N	A	L
O	U	E	Q	T	N	T	R	E	G	I	O	N	A	T	A
N	T	M	A	I	R	E	S	O	U	R	C	E	E	E	S
X	A	W	A	D	Z	K	B	Q	I	R	R	I	C	R	E
H	N	R	Y	R	A	I	A	F	T	H	G	U	O	R	D

WORD BANK			
WATER CYCLE	VIRTUAL WATER	PRECIPITATION	GROUND WATER
DROUGHT	EVAPORATION	IRRIGATION	WATER SCARCITY
AQUIFER	DESALINATION	NATURAL HAZARD	RIVER
RAINFALL	METEOROLOGY	OCEAN	WEIR
REGION	RESOURCE	ISOBAR	LAKE