



Task Card 1

Interpreting, Analysing and Evaluating



Task Card 2

Analysis and use of sources

GIVE US A SIGN

Maps of flooded areas show what is happening in different areas. This assists people in making decisions about travel and safety information. The following symbols were used in the ABC interactive map (www.queenslandfloods.crowdmap.com).

Can you interpret what they mean from the list?



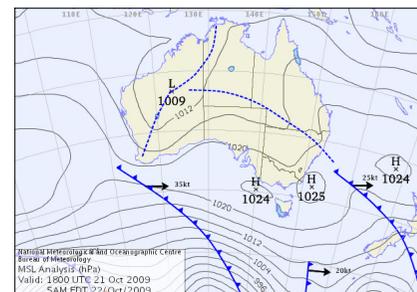
EVACUATIONS
SCHOOLS RECOVERY
HAZARDS
VOLUNTEER EFFORTS
DEBRIS IN WATER
RECOVERY ASSISTANCE REQUIRED
HELP / SERVICES
SEWAGE
PROPERTYDAMAGE
CONTAMINATED DRINKING WATER
ROADS AFFECTED
ELECTRICITY OUTAGES
TRUSTED REPORTS

THE FORECAST

A weather forecast plays an important role in informing people of the weather conditions in their local area.

You can learn more about the weather by studying the weather page in the newspaper and reading the daily forecasts. Understanding a weather forecast is a useful skill and will always serve you well. Find the weather forecast in today's paper?

- On what page in the newspaper is the daily weather report? Is it on the same page everyday?
- List the information you can find on this page.
- List the Australian city that has the highest and lowest temperature forecast today.
- Where is the information for this weather forecast sourced?
- What symbols are used to visually represent different aspects of the weather?
- Highlight or circle any of these weather terms used in the forecast. *mostly fine, isolated showers, moderate wind, partly cloudy, scattered showers, rain / showers increasing, fine, thunderstorms, over the interior, coast and adjacent inland, tending light to moderate winds*
- Test your skill by forecasting the weather for the week ahead and then checking to see how accurate you are.





WATER AND ELECTRICITY DON'T MIX



Flooding can have major impacts on electricity supply and networks. Here are some safety tips that should be considered before, during and after flooding. Each tip is jumbled up (to help you, the first word has a capital and the last has a full stop after it).

Make sense of them and place them in to their correct category –

Before Flooding

During Flooding

After Flooding

- power-line Be height moving around in aware of boats. reduced if clearance floodwaters
- off all appliances. Turn and electrical unplug
- by affected and water inspected switchboard licensed Have appliances, all insulation electrical before contractor by electrical use. a
- equipment any If move electrical to ground. possible, higher any
- when may as fallen hidden Take be clearing power-lines care up and may from of the power-poles shifted flood force waters. have
- bare not electrical switches standing water you feet. Do operate while in have or or when
- power the switchboard. off at main Turn

BE PREPARED

Every family should have a disaster kit in their home. The kit will help you and your family during a disaster. In a flood, you might be without electricity, the water supply may be polluted, or you may not be able to leave your house for a few days. In times like the recent flood events, a disaster kit will make it easier. Your family will probably never need to use the kit but it's always better to be prepared.

Make a list of supplies that you should include in your disaster kit and explain why they are important.





Task Card 5

Processing and analyzing data and information



Task Card 6

Money and financial mathematics

SAFETY FIRST

In the event of a flood especially if you see water rising, there are a few safety tips you should follow. Crack the code to find out what they are.

Use the grid coordinates to unlock the letters.

- (5,5) (8,10) (2,9) (2,1) (3,10) (10,5) (4,9) (7,1) (7,5)
(3,5) (5,1) (4,1) (5,10) (10,8) (4,5) (2,8) (6,5) (5,2) (4,2) 10,5) (1,4)
- (7,2) (8,6) (2,1) (7,8) (1,1) (8,10) (6,3) (10,3) (9,3) (2,7)
- (4,1) (9,8) (3,10) (4,6) (8,2) (5,4) (9,8) (9,3) (6,5) (3,1) (4,10)
(5,7) (10,5) (6,9) (4,7) (4,4) (6,9) (3,1) (9,1)
(5,9) (7,5) (4,2) (1,1) (5,8) (3,2)
- (2,9) (6,5) (1,3) (6,10) (7,7) (8,1) (1,9) (2,7) (3,4) (10,8) (5,7) (2,3)
(7,5) (4,7) (5,3) (9,8) (9,1) (1,4) (6,3) (4,10) (8,5) (3,1) (4,6) (8,2)
(7,7) (3,3) (3,2) (1,4) (6,5) (5,7) (10,8) 2,3) – (2,10) (7,2) (2,1) (9,8) (7,5)
(9,7) (10,8) (1,3) (4,7) (5,1) (2,9)
- (9,7) (5,7) (10,5) (9,10) (2,1) (8,8) (1,9) (8,4) (4,6) (9,10) (10,8)
(8,2) (2,10) (4,7) (10,4) (1,7) (5,4) (10,8) (4,2) (3,7) (5,9) (10,2)
(4,9) (6,1) (5,7) (7,1) (3,2) (8,8) (1,3) (6,5) (9,8) (7,5) (1,4)

10	Q	W	E	R	T	Y	U	I	O	P
9	A	S	D	F	G	H	J	K	L	Z
8	X	C	V	B	N	M	Q	W	E	R
7	T	Y	U	I	O	P	A	S	D	F
6	G	H	J	K	L	Z	X	C	V	B
5	P	O	I	U	Y	T	R	E	W	N
4	S	D	F	G	H	J	K	L	Q	M
3	A	M	N	B	V	C	X	Z	L	K
2	J	F	D	O	I	P	A	S	G	H
1	U	T	E	S	N	L	O	W	R	Y
	1	2	3	4	5	6	7	8	9	10

THE LEVY

The Federal Government is introducing a flood levy to be paid by those who earn over \$50 000 a year during the 2011 / 2012 financial year. Calculate what the following earners will pay based on the percentage of their income set out by the Australian Government.

Incomes over \$50 000 will be charged 0.5 % of their yearly income.
Incomes over \$100 00 will be charged 1% of their yearly income.

Income	Charge %	Levy Amount
\$175 000		
\$ 48 000		
\$ 92 000		
\$ 101 050		
\$ 62 500		
\$ 73 250		
\$ 292 000		
\$ 149 375		
\$ 50 025		





Task Card 7
Expressing and developing ideas



Task Card 8
Processing and analyzing data and information

I'll Be Dammed

With the recent natural disaster, many questions have been asked about the management of resources. In Brisbane, it is believed that there would have been a lower river peak and therefore less flooding if more water had been released from the Wivenhoe Dam. The Dam was originally built to hold additional water and reduce the impact of downstream flooding, providing a safe and reliable water supply to South-East Queensland. However with the extreme weather, water from Wivenhoe Dam's catchments meant its reservoir had risen to extremely high levels – 190% capacity –the highest ever recorded.

- Should more water have been released before the deluge to give the dam more capacity for storage?
- Should more rivers be dammed to help avoid flooding?

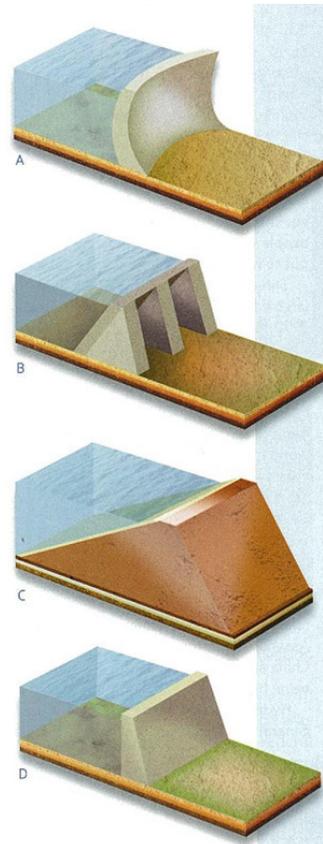


Wivenhoe Dam

Types of Dams

In Australia, there are 500 large (more than 15 metres high) dams that can store a total of 93 957gigalitres* of water. These dams are important for our communities in storing water for domestic, agricultural and industrial use. They are also built to lessen the effects of flooding. These large dams are an astonishing feat of engineering, constructed to withstand the force of large amounts of water.

Below are diagrams of the four types of dams in Australia. Label the diagrams by reading the descriptions and find out which of the listed dams in Australia are examples of each.



Buttress dams have 45 degree walls that transfer the force downwards.

Arch dams redirect a lot of pressure to the valley sides.

Gravity dams are thick, massive structures that can hold back enormous amounts of water under their own weight.

Embankment dams are made of rock, gravel and sand, with the finest materials in the centre to form a waterproof core.

Talbingo Dam (New South Wales)
Burdekin Falls Dam (Queensland)
Gordon Dam (Tasmania)
Lake Rowlands Dam (New South Wales)

* What's a gigalitre?



WHAT A STORY

Here is a story that ran during the floods. Some of the words have been washed away. Can you fill them in so the story makes sense?

Lives put at risk by motorists

(Alister Thomson – The Morning Bulletin)

POLICE are warning it is only a matter of _____ before another driver drowns unless motorists _____ driving through flooded roads. The warning comes after 10 drivers yesterday _____ on roads closed due to flooding in the region. On the Fitzroy Development Road, two men were stranded on the roof of their _____ after it was swept off by flood waters. A swift-water rescue team _____ the men.

Constable Danielle O'Rourke said that the drivers _____ themselves and passengers in _____ by going into water.

"It's a case of a bit of ignorance, probably thinking, 'no one is around we'll be all right'. You do not know how fast the _____ is, if there's a current and what's underneath the water."

Senior Sergeant Findlater _____ there had been "three deaths in the last _____ of weeks from exactly this sort of behaviour".

He said it was always dangerous to drive _____ floodwaters as the road may have shifted or there could be debris on the _____.

Inspector Curtin said police had a range of charges they could use against motorists who flouted the law including driving without due care and attention.



THE RIVER PEAKS

Below is a list of rivers and the approximate peaks they reached during the January floods as reported in local papers.

Use the data and present it on a bar graph.

Answer the questions about the information given.



Name of River	Height at Peak
Balonne	12.5 m
Bremer	19.5 m
Brisbane	4.46m
Brunswick	2.5 m
Burnett	5.75m
Castlereagh	5.5 m
Clarence (Grafton)	7.6 m
Clarence (Tabulam)	15.0 m
Condamine	14.8 m
Fitzroy	9.2 m
Macintyre	10.64m
Mary (Gympie)	19.25m
Mary (Maryborough)	8.2 m
Richmond	13.6 m
Wilson	4.4 m

1. What was the difference in the Brisbane River and Bremer River peaks?
2. Why are two readings given for the Clarence and Mary River? Why are the readings different?
3. Which two rivers had the closest readings to each other?
4. Name a town which the Condamine River inundated.
5. Add all the river's peaks to find a total.