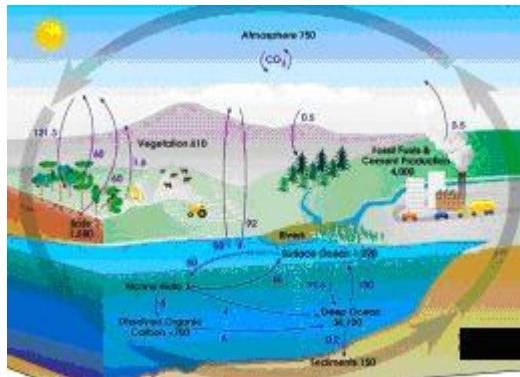


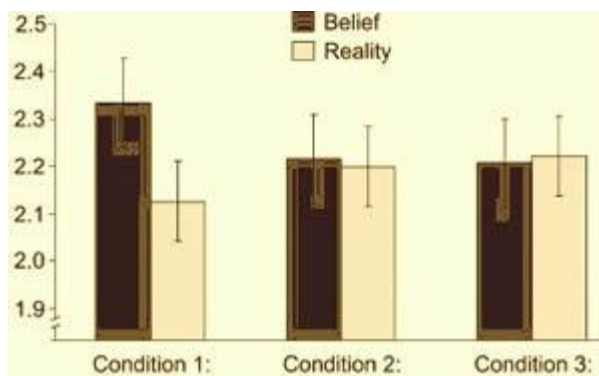
## Using Graphical Data

Look at the following images and identify how they could be improved to be more suitable for an academic report:

**Example 1:** A Diagram from a report on the effects of global warming:



**Example 2:** A bar chart from a psychology experiment testing if belief reasoning is automatic:



**Example 3:** Photos from pig farming report



Some cute pigs from Millbank Farm



A view of Millbank Farm

**Example 4:** Table from education report on GCSE grades

English →		GCSE Grade				
↓	Maths					
	A*-A	B-C	D-E	F-G	Fail	
A*-A	10	6	1			17
B-C	3	30	16	2		51
D-E			3	19	3	25
F-G						
Fail						
	13	36	20	21	3	93

The images for this exercise have been adapted from:

- 1) OregonWild [www.oregonwild.org](http://www.oregonwild.org)
- 2) Apperly, I.A., Riggs, K.J., Simpson, A. Chiavarino, C., and Samson, D. (2006). "Is Belief Reasoning Automatic?" *Psychological Science*, 17(10), 841-44.
- 3) Photos by Misterreels and Andy Culpin from [Stock.xchnq](http://Stock.xchnq)

## Using Graphical Data Answers

### Example 1:

The diagram is too small and blurred to be understood. There is no title explaining what the diagram is, and no key to identify what the arrows and figures mean. Because there is no title, there is also no way of referring to the diagram in the report e.g. "see figure 1." Also, the diagram is not referenced, and there is no attribution showing where it came from.

Diagrams need to be large enough to be clear for the reader - even this larger version below could have a clearer key with more distinct colours for the arrows and numbers.

A better example:

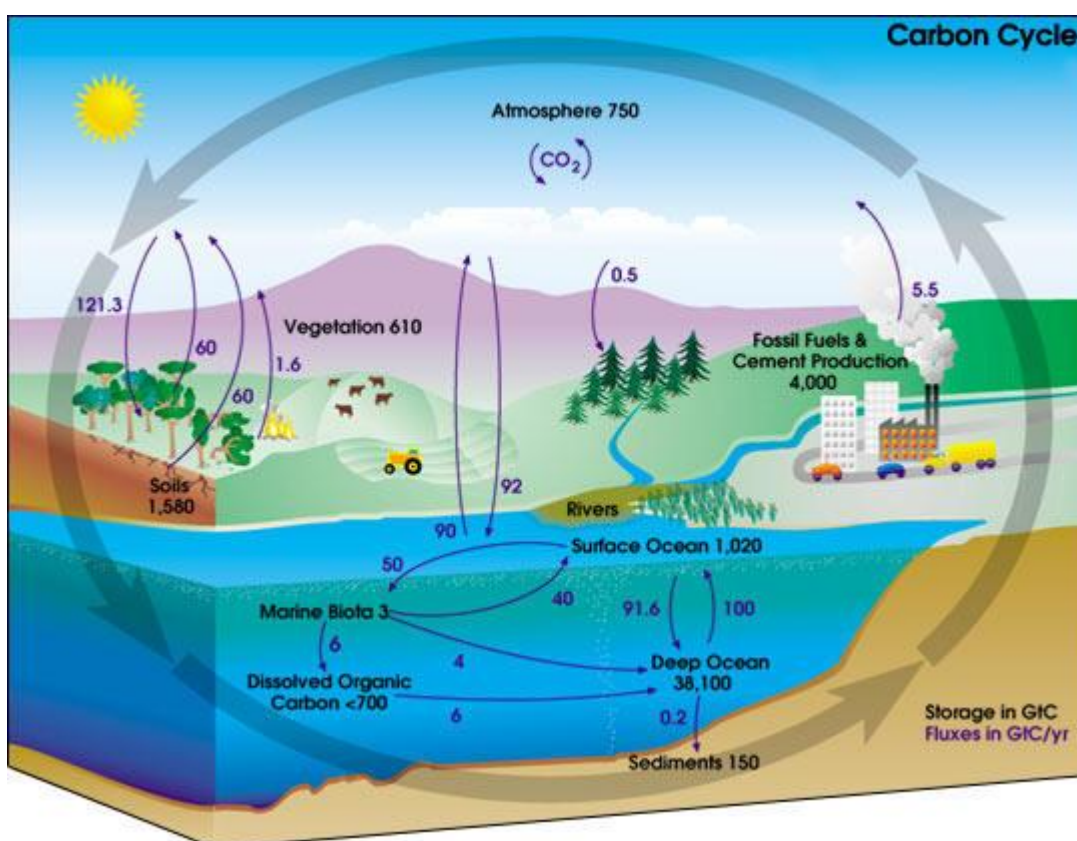


Fig. 1: The Carbon Cycle showing carbon flux and carbon storage. Diagram taken from OregonWild [www.oregonwild.org](http://www.oregonwild.org)

### Example 2:

The bar chart has no label on the Y axis and a very vague label on the X axis. The colour of the "belief" bars and the background makes the graph difficult to read. There is no overall title for the graph.

A better example:

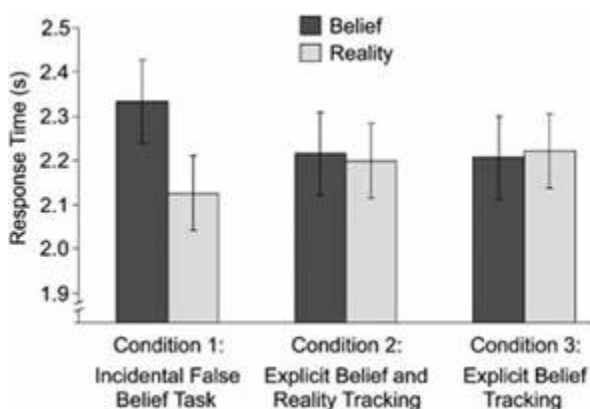


Fig. 2: Mean response times (bars represent standard errors) for belief and reality probes in Conditions 1, 2, and 3).

### Example 3:

The photographs do not add any information to the report on pig farming. Photograph 1. is merely there to be "cute" and photograph 2. does not show any useful detail of farming procedures.

Photographs need to be relevant and included for a purpose. If you are just adding photos to make your report look pretty, better to leave them out as they can detract from your message.

**Example 4:**

The table is hard to understand as there are no grid lines and the sizes of the columns are all different. There are no labels for the "Total" columns and no overall title explaining the table.

A better example:

			English GCSE				
	GCSE Grade	A*-A	B-C	D-E	F-G	Fail	TOTAL No. Pupils
	A-A*	10	6	1			17
Maths GCSE	B-C	3	30	16	2		51
	D-E			3	19	3	32
	Fail						
	<b>TOTAL No. pupils</b>	13	36	20	21		93

Fig. 5 Comparison of GCSE Maths grades against GCSE English grades for pupils at Grange Hill School (2006).