
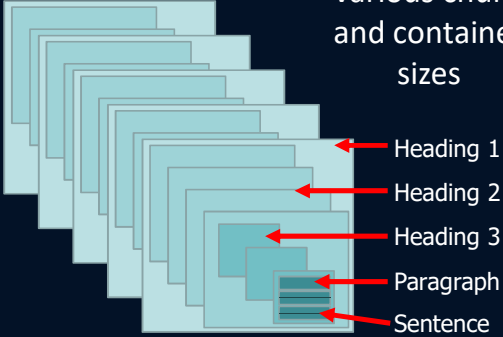


Paragraphing


Chunking content



Various chunk and container sizes




Heading 1
Heading 2
Heading 3
Paragraph
Sentence



Paragraph – group of related sentences developing the one main idea

First sentence – an overview of the paragraph

New idea, new paragraph




Fact Recently, a growing body of scientific evidence has indicated that indoor air can be more seriously polluted than outdoor air. In addition, research indicates that on average people spend approximately 90 per cent of their time indoors.

Fact indicates that on average people spend approximately 90 per cent of their time indoors.

Conclusion Thus, for many people, the risks to health may be greater due to air pollution exposure indoors than outdoors. Of greater concern is that the people who may be exposed to indoor air pollutants for the longest periods of time are often those most susceptible, which include the very young, the elderly and the infirm.


Conclusion Thus, for many people, the risks to health may be greater due to air pollution exposure indoors than outdoors. Of greater concern is that the people who may be exposed to indoor air pollutants for the longest periods of time are often those most susceptible, which include the very young, the elderly and the infirm.




Conclusion The very young, the elderly and the infirm are more susceptible to illness and are exposed to indoor air pollutants the most. Scientific evidence shows that indoor air can be more seriously polluted than outdoor air. Research also shows that, on average, people spend approximately 90 per cent of their time indoors.

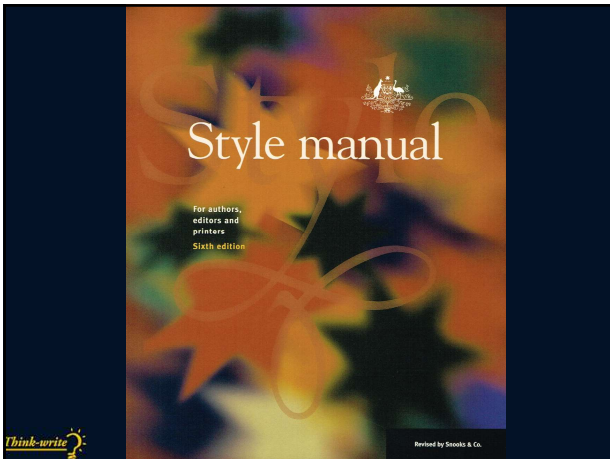
Fact indoor air pollutants the most. Scientific evidence shows that indoor air can be more seriously polluted than outdoor air. Research also shows that, on average, people spend approximately 90 per cent of their time indoors.

Fact that, on average, people spend approximately 90 per cent of their time indoors.



Write some content





Non-discriminatory language

Use gender neutral titles.

- Chairperson
- Principal

Avoid 'him/her'. Use 'they', 'them'.

A motorcyclist must remove his or her helmet when being breath tested.

Motorcyclists must remove their helmets when being breath tested.



Non-discriminatory language

Acceptable terms

- Aboriginal people
- Aboriginal Australians
- Torres Strait Islanders
- Older people
- People with a disability



Imprecise terms

Avoid 'and/or'

Apples or oranges
or both.

Apples or oranges
but not both.

1.It includes every possibility imaginable with *and* alone plus every possibility imaginable with *or* alone.

2.It should best accord with the equity of the situation.

3.It includes some but not all of the possibilities of *and* and *or* (but legal scholars disagree about which possibilities to include).

4.It means either *and* or *or* but it can't mean both.

5.It is meaningless.



If tree hollows and/or active nests are present, a Nest Box Installation and Active Nest Relocation Plan will be submitted.

If tree hollows or active nests are present, a Nest Box Installation and Active Nest Relocation Plan will be submitted.

- tree hollows
- active nests



Acronyms

Write in full the first time used
National Parks and Wildlife Service
(NPWS)

unless well known
Qantas, radar, scuba



No	Yes
<p>The Environment and Heritage Steering Committee (EHSC) will decide whether The EHSC will</p>	<p>The Environment and Heritage Steering Committee will decide whether..... The committee will</p>

Think-write

Apostrophes

Only use apostrophes

- in contractions: don't, can't, it's, wouldn't
- to indicate ownership: Tom's book, bikers' rights

Kellys Creek
Logans Crossing
Batemans Bay




Think-write

Capitals


Only use capitals

- at the beginning of a sentence or heading
- for the names of people
- for titles of specific things or entities

Australian Government will speak at ...
governors speak to Australians

Think-write


No	Yes
We are working with Sydney City Council (the Council) to..... In two weeks the Council will	We are working with Sydney City Council to In two weeks the council will (second reference uses a lower case 'c' for council)




Spelling

Use British not American style

- *ise* rather than *ize*; organise
- *our* rather than *or*; colour
- *ogue* rather than *og*; dialogue
- *yse* rather than *yse*; analyse
- double 'l' in words like equalled, travelled, fulfilled
- one 's' only in focused
- program vs programme



The review process



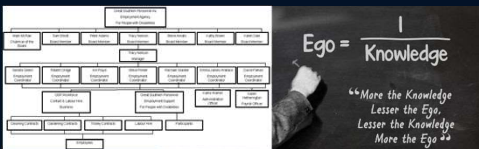
Reviewing documents



Think-write

When reviewing somebody else's work, or having your own reviewed...

Leave your ego at the door!



Think-write

Document reviews:

- thinking together
- richer outcome
- establish corporate 'voice'



BUT

- costs time
- slows down documentation
- can crush spirits



Think-write

When you review

- Ignore matters of personal style
- Focus on usefulness to the reader
- Is it fit for purpose?



- Do I understand what this is about straight away?
- Are there any sentences that I need to re-read to understand?
- Does the logic flow?
- Is the language appropriate to the user?
- Is the language consistent with the organisation's style?



Some practicalities

- Consider discussion over marking up
- Consider comments instead of track changes
- Generally, one reviewer at a time



Be gentle, be kind;
but be robust



Ethos

Logos

Pathos



Ideas from Peter Thompson: *Persuading Aristotle*

Grammar & style

Friend or foe?



Punctuation

Punctuation is a rational part of English composition, and is sometimes quite significantly employed. I see no legal reason for depriving legal documents of such significance as attaches to punctuation in other writings.

Lord Shaw in *Houston v Burns* 1918



Dear John,
I want a man who knows what love is all about. You are generous, kind, thoughtful. People who are not like you admit to being useless and inferior. You have ruined me for other men. I yearn for you. I have no feelings whatever when we're apart. I can be forever happy – will you let me be yours?
Gloria

Dear John,
I want a man who knows what love is. All about you are generous, kind, thoughtful people, who are not like you. Admit to being useless and inferior. You have ruined me. For other men I yearn. For you, I have no feelings whatever. When we're apart I can be forever happy. Will you let me be?
Yours,
Gloria

Source: unknown



Commas

Use

- separate thoughts in a sentence
- for clarity
- to separate items in lists
eg high, long, wide.
- around additional information
eg The driver, despite looking down the road, pulled out in front of him.



Commas

As light hydrocarbons evaporate the oil vapor pressure falls.

As light hydrocarbons evaporate, the oil vapor pressure falls.

As light hydrocarbons evaporate the oil vapor, pressure falls.



Comma

Reduce ambiguity.

He was not run over mercifully.
He was not run over, mercifully.

All the players who are now back in Kananga strongly deny the charges.
All the players, who are now back in Kananga, strongly deny the charges.



Comma

Link longish clauses.

While we were walking in the park, exploding fireworks were illuminating the north side of the harbour.

This will exacerbate, not resolve, the problem.



Semicolon

Similar to, but stronger than, the comma.
Link clause that could be separate sentences, but that have a closer logical link.

We expect ministerial approval next week; the work can then start immediately.

Rain is forecast; however, there are no clouds to be seen.



Colon

Amplifies, summarises or contrasts.

We were concerned: the official party had not yet arrived and the ceremony was about to start.

There is only one word for it: dishonest

There were four tickets: not enough for all of us.



Dash

Additional or contrasting information that flows from a clause.

The main cause of foodborne illness is inadequate cooking – but that is not what we came here to talk about.


This is because the effects can occur some time or distance away – for example, vegetation clearing can result in dryland salinity hundreds of kilometres away.

National policies may change the decision-making environment – water licensing reform is an example – or provide guidance on suitable areas for government investment.



?


!



Bulleted lists

If the bullet point is a complete sentence, use sentence punctuation.

If the bullet point is part of an extended sentence, no punctuation is needed.




To use 'or' logic in a bulleted list, carefully word the lead in.

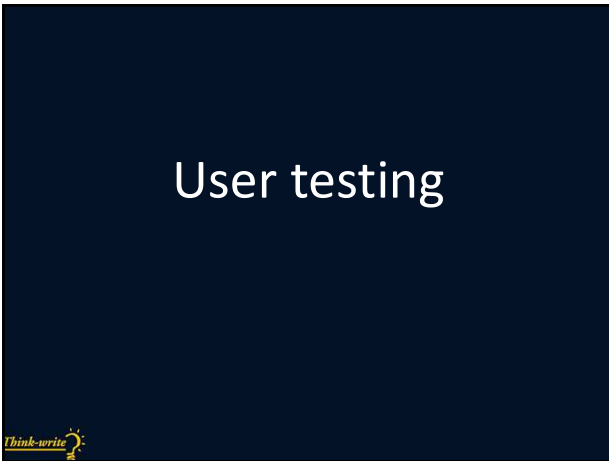
Give each child one or more of the following:

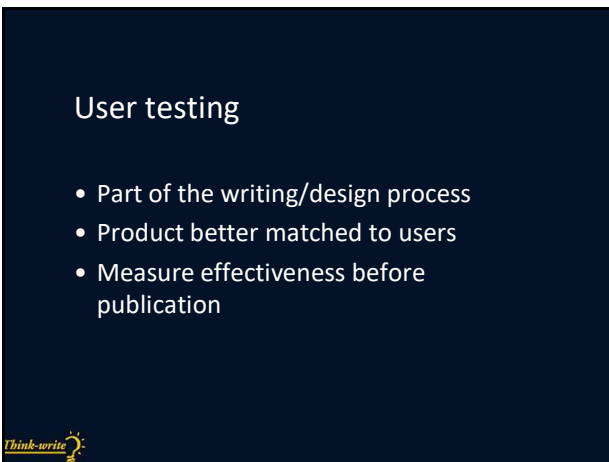
- a sweet
- a toy
- a blanket.

The items you may give each child include:

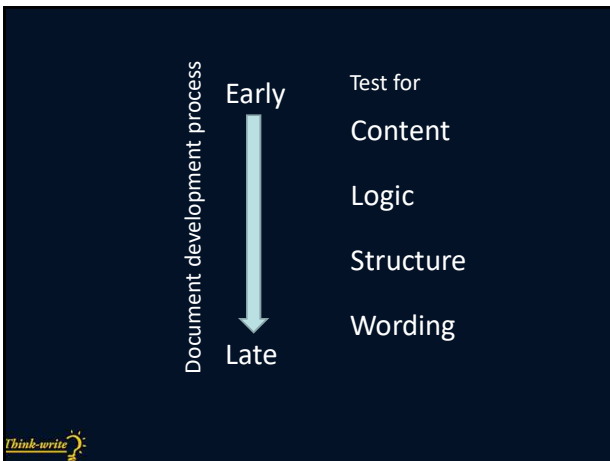
- a sweet
- a toy
- a blanket.













See page 62 of workbook

What do you think about indoor air pollution?


It's all a beat up

My laser printer is giving me cancer


Think-write

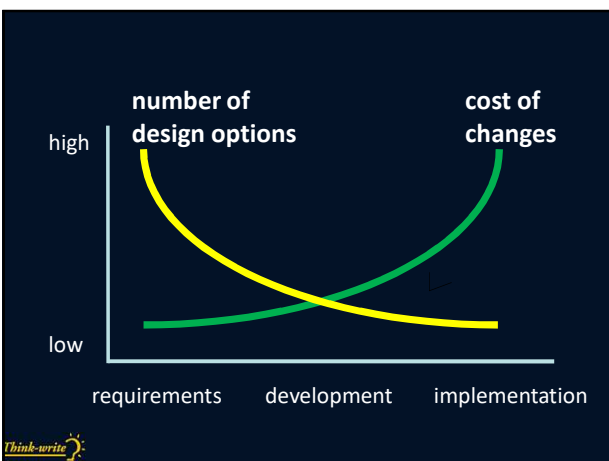
The text block contains a reference to a workbook page, a question about indoor air pollution, and two examples of informal or humorous writing.

- Does this grab your attention?
- Does this document look as though it will cover all your questions?
- What parts are you unlikely to read?
- Does the order make sense to you?



- What do you think this is about?
- Where would you start reading this document?
- Which section is of most interest or relevance to you?
- After reading the first page, what is the next thing you are likely to do?
- What do you think the writer wants you to do after reading this?





If you are not testing real users doing real work, you are making it up




Think-write

Don't assume. Test.

Think-write


Choosing not to test is arrogant.





The first rule of communication:
It's not what our message does to the listener (or reader), but what the listener (or reader) does with our message, that determines our success as communicators.

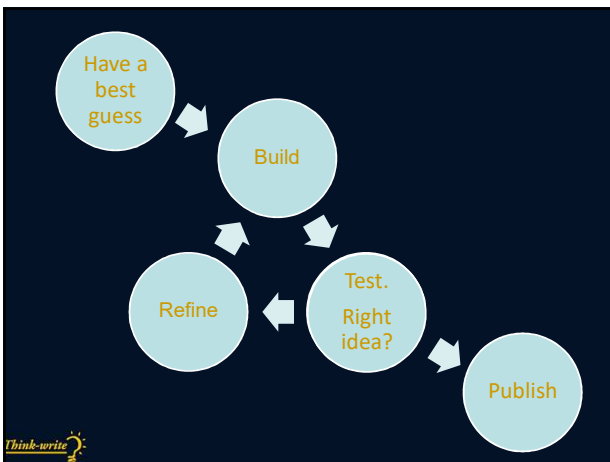
Hugh Mackay in *Why don't people listen?*

Think-write

 Choosing not to test may be reckless.


 **Reckless writing:**
Preparing a document without a deliberate and considered concern for readers, or a writer failing to apply their mind to consider how a document will be understood.





Focus on the task or purpose of the communication piece

- Do users see the document as important?
- Can users find the information they need?
- Can they accurately extract meaning when they find it?



Testing only at the end is risky

- Ineffective
- Reputational damage
- Legal consequences



Document testing ideas



Testing extent determined by

- the complexity of your document
- your users and what they need to do with the document
- the risk of not understanding or acting on the document.



1. Ask for comments about the document.

- What did you think?
- Did all that make sense?



2. Readability formulae

eg. Flesch-Kincaid grade level
Flesch reading ease score



But these are mechanical indicators only and don't consider context.



3. Structured interview


- What do you think this means?
- Anything you are unsure about?
- What confused you?
- What did you expect to find?
- Any sentences you needed to read twice?

Structure your questions around the document's purpose.



4. Multiple choice test

Focus on testing understanding of content.

 But may only pick up issues predicted by the questioner.



5. Set some problems to solve


Users solve a real scenario by reading the document.

 Goes beyond readability; tests usability



6. Full comprehension test

Extends multiple choice to include free responses.

 Include questions like:

- How did you reach that conclusion?
- What did you find first before reaching your answer?



7. Response time tests

Set some comprehension or scenario questions or both.
Measure the time it takes users to find the correct answer in the document.



8. Fill in the gaps

Remove every 5th or 6th word – users fill in missing word from the context.



9. Paraphrase the document

Ask users to tell the message of the document back to you, as though they were explaining it to a friend.



10. Think aloud

Ask the user to read each sentence, one at a time, aloud. Ask them to explain their reactions or thoughts after each sentence.



Ideas for testing documents

1. Ask for comments
2. Readability formulae
3. Structured interview
4. Multiple choice
5. Set some problems
6. Full comprehension test
7. Response time
8. Fill in the gaps
9. Paraphrase
10. Think aloud



Audit

Have I done what I said I'd do?

VS

Evaluation

Did I achieve the outcome?



There is never enough time or money to do it right, but there is always enough time and money to do it again!



Writing persuasively



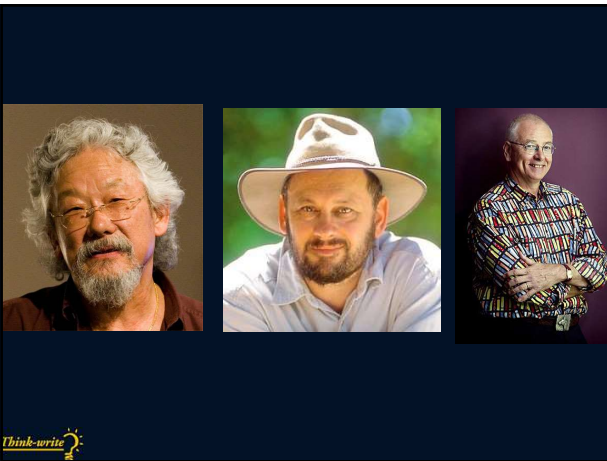
Ethos

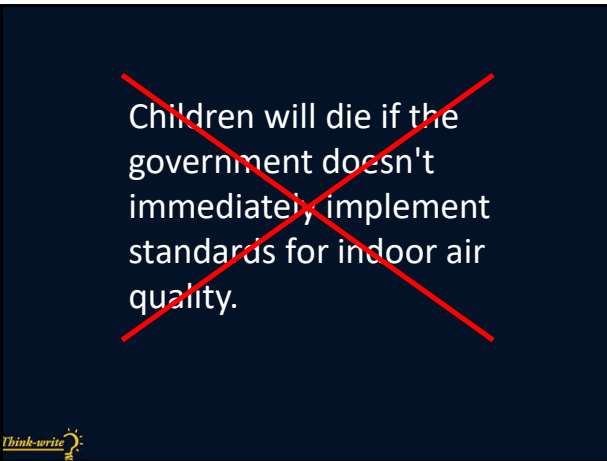
Logos

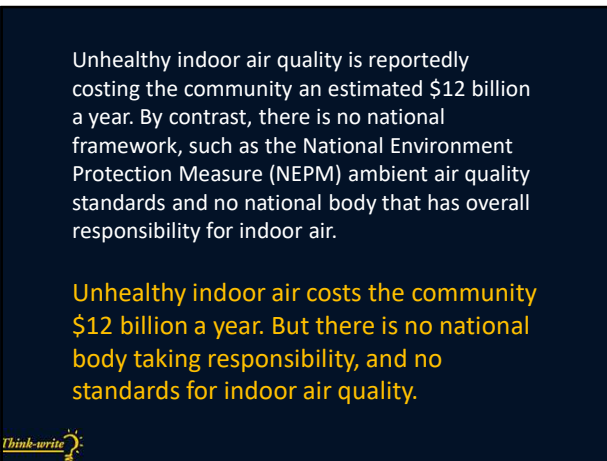
Pathos



Ideas from Peter Thompson: *Persuading Aristotle*

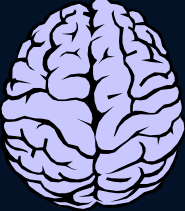






Left brain

- Analytical
- Literal
- Language
- Sequential
- Logical




Right brain

- Creative
- Visual
- Metaphoric
- Holistic
- Feeling

Think-write

Communication is more persuasive when you make contact with both sides of the brain




Appealing to the heart

- use metaphor
- tell stories (examples)
- use pictures and graphics

Think-write

Communication is more persuasive when you make contact with both sides of the brain



Appealing to the mind

- Use reason and logic.
- Quote statistics and reputable studies.
- Cite experts.
- Back up your view and refute other views.

Think-write

Start with a fact

Australia's mean surface air temperature has warmed by 0.9°C since 1910.



Begin with your most persuasive point.

Green credits will broaden your market appeal



Begin with a story or metaphor

Tony and his family have had oyster leases on the river 30 years.



Begin with a question

Have you ever wondered
how long treated pine takes
to decompose?



Open with a startling comment

I bet you didn't know water
from the Hawkesbury has ...



Begin directly with what you are seeking

I'm writing to you to ask for
your support in the next
round of funding



The rest of the text

- Be positive
- Use a conversational tone
- Keep to the point
- Build your evidence
- Use facts and statistics to back up your position
- End with an open door



Commonly confused words



'accept' and 'except'

accept – to agree to receive or do

except – not including

I will accept that argument.

Dinner will be served at 6pm, except on Sundays.



'advice' and 'advise'

advice – recommendations about what to do

advise – to recommend something, to inform

John gave me some advice.

John will advise the best course of action.



'affect' and 'effect'

affect – to change or make a difference to

effect – a result; to bring about a result

The manager's attitude affected all workers.

The effect was mass resignations.



'alternate' and 'alternative'

alternate – taking turns

alternative – an option

Teams A and B clean the kitchen in alternate weeks.

An alternative is to hire a cleaner.



'brake' and 'break'

brake – stopping a vehicle

break – to separate into pieces

We need to brake the progress of this project.

We need to break this project into 3 sub-projects.



'canvas' and 'canvass'

canvas – a type of strong cloth

canvass – to seek people's opinions

Let's canvass the market about the colour of our new canvas.



'complement' and 'compliment'

complement – completes or goes well with

compliment – expression of praise

We complimented the chef on the sauce that complemented the vegetables.



'council' and 'counsel'

council – a group of people who manage

counsel – advice; to advise

The city council decided against the proposal.

The decision was based on legal counsel.



'dependent' and 'dependant'

dependent – relying on something else

dependant – person relying on someone else

The success of the project is dependent on swift action.

His son is still a dependant, despite his age.



'imminent', 'eminent', 'immanent', 'immanant'

imminent – about to happen

eminent – of high rank, importance

immanent – inherent, pervading

immanant – function of a matrix

The king's entrance is imminent.

The eminent professor gave a speech.

Protection of individual freedoms is immanent in the constitution



'it's' and 'its'

it's – the abbreviated form of 'it is'

its – ownership.

It's raining outside.

The dog buried its bone in the garden.



'licence', 'license', 'licensee'

licence – authority to do something

license – to give somebody authority to do something

licensee – the entity that has been given the authority

The police officer asked to see my drivers' licence.

I had been licensed for 40 years.

The licensee must meet all conditions of the licence.



'moral' and 'morale'

moral – principles of right and wrong

morale – psychological well-being

The boss always acted in a moral way, so the morale of workers was high.



'principal' and 'principle'

principal – of highest rank, chief

principle – fundamental idea, general truth

The school principal said it was a matter of principle.



'their' and 'there'

their – belonging to a group of people

there – referring to a place

It was their special place.

It was over there, near the tree.



'that' and 'which'

Use 'which' for a set of words enclosed with commas that adds information

Leap years, which have 366 days, have an extra day in February.

Use 'that' if it limits what you are talking about.
Meetings that are held on Wednesdays are in room 2.

Consider deleting 'that'.
Meetings held on Wednesdays are in room 2.



'to' and 'too' and 'two'

to – a preposition
too – as well as
two – the number 2

I want to go to the number two show too.



'reign' and 'rein' and 'rain'

reign – what the Queen does
rein – what you hold on to when riding a horse
rain – water falling from the sky



'stationary' and 'stationery'

stationary – not moving
stationery – writing materials



'your' and 'you're'

your – belonging to a person

you're – abbreviation of 'you are'



<http://thinkwrite.com.au/articles/>



Communicating without words



Graphics – never just decoration






Graphics must help communication



Fillets reduce leading edge vortices in nature and in engineering

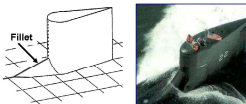
Fillet on dorsal fin of shark



Fillet

[Rader, 1997]

Fillet on Seawolf submarine



Fillet

[Devenport et al., 1991]

PENNSSTATE

Think-write

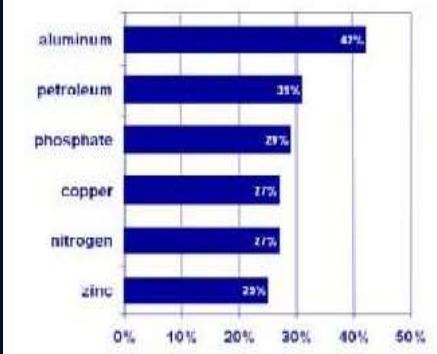


From DECC's Communicating Science newsletter

Water and biological sampling in Australian alpine parks to check on the effects of climate change.

Photo by Tim Pritchard, DECC.

Think-write

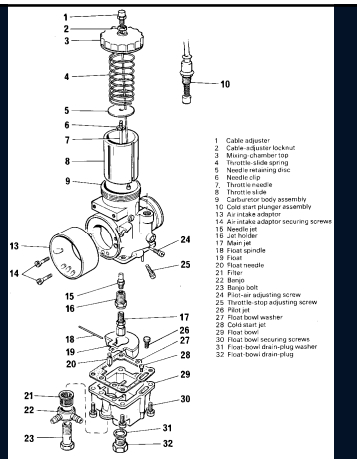


Resource	Percentage of World Population
aluminum	43%
petroleum	31%
phosphate	29%
copper	27%
nitrogen	27%
zinc	22%

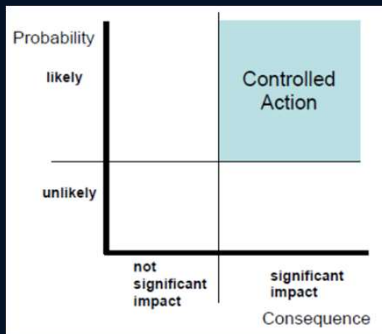
Figure 4.5 has 5% of the world's population, but uses an average of 30% of all resources

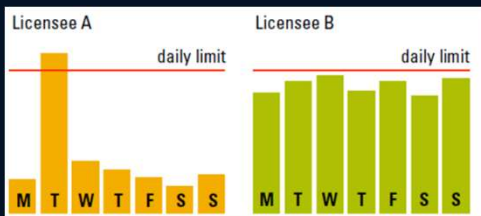
Think-write

Graphics that replace words



Graphics that support the words





Information design by Montague Leong Design



Digital Acquisition System

- Accelerometer outputs an analog voltage
- Hardware converts analog signal to digital
- Computer samples a number of points
- Data is exported to popular applications
 - Microsoft Excel
 - Matlab

Digital data acquisition changes the data's form

Think-write

Development can have a negative impact on the environment

... but developing with proper care and control reduces the environmental impact generated

... and by using green offsets we can reduce the overall environmental impact in the area so the net effect is positive.

Green offsets

Information design by Montague Leong Design

Think-write

On 15 July, as block 198 passes Site A, with 20 credits the site could discharge 2.24 tonnes (112 x 20 x 0.1%).

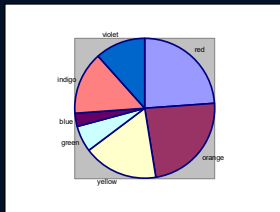
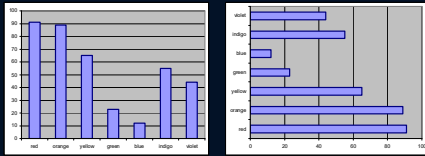
On 16 July, as block 198 passes Site B, with 45 credits the site could discharge 5.04 tonnes (112 x 45 x 0.1%).

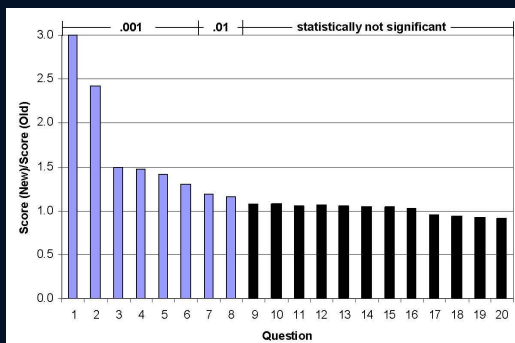
If Site A had no discharge, it could trade 20 credits to Site B which could then discharge 95 credits of salt— 7.28 tonnes (112 x 65 x 0.1%).

Information design by Montague Leong Design

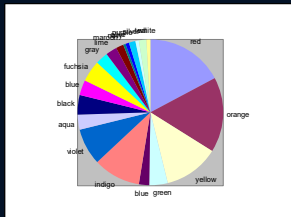
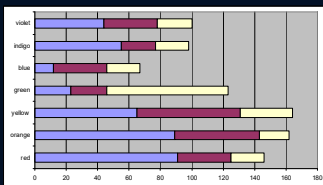
Think-write

Graphs to compare quantities

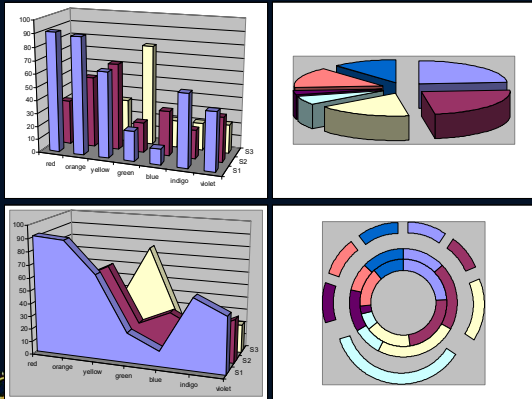




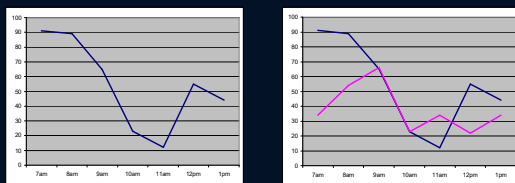
But not



and never

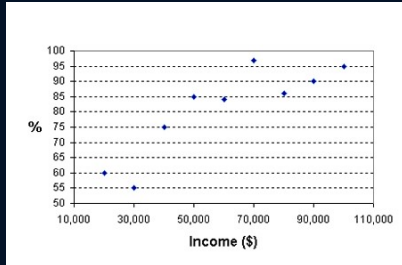


Line graphs are good for showing a trend

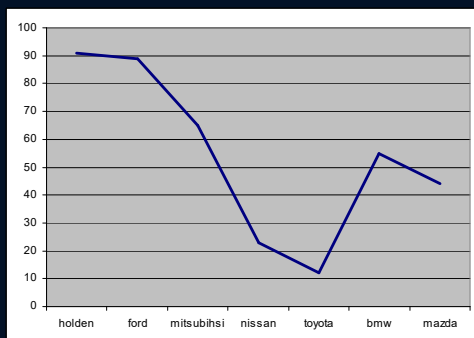




Scatter diagrams show relationship



continuous vs discrete data



When to use tables

- For look up information
- When trends or comparisons are not so important
- When precision is important
- When there is lots of data
- For more numerate audiences



Constructing tables

- Top row or left column or both to organise
- Use lines or shading to separate, but use sparingly
- Horizontal lines more useful than vertical



	Brass		Steel	
	Bolts	Nuts	Bolts	Nuts
10mm				
Wholesale	\$1.00	\$1.25	\$1.20	\$1.00
Retail	\$2.00	\$3.00	\$1.80	\$1.60
15mm				
Wholesale	\$1.20	\$1.30	\$1.00	\$0.80
Retail	\$1.60	\$2.00	\$2.00	\$1.50