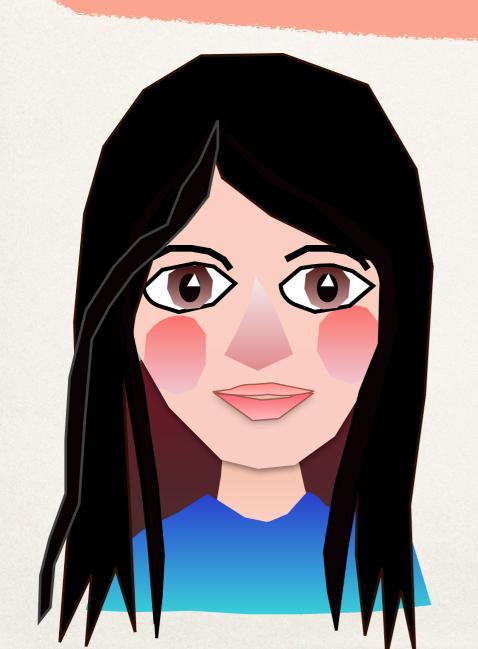
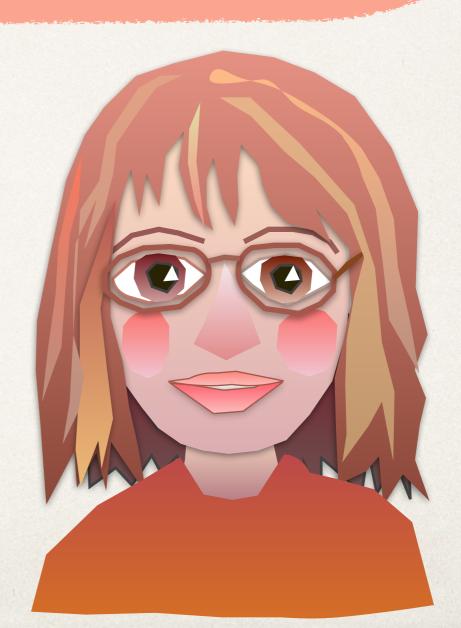
Ms Corbo and Ms Green's advice for power learning – based on the principles of psychology

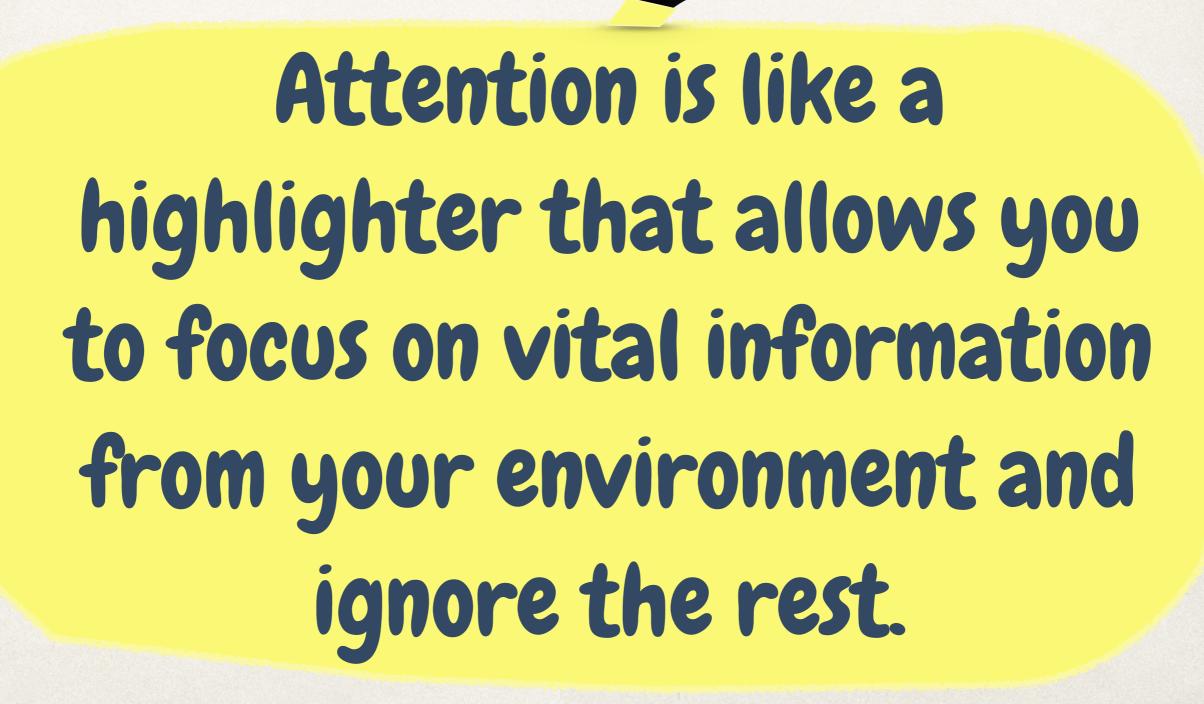




Attention is the first step required in creating a new memory.



Attention refers to concentrating on some stimuli in your environment while tuning others out.

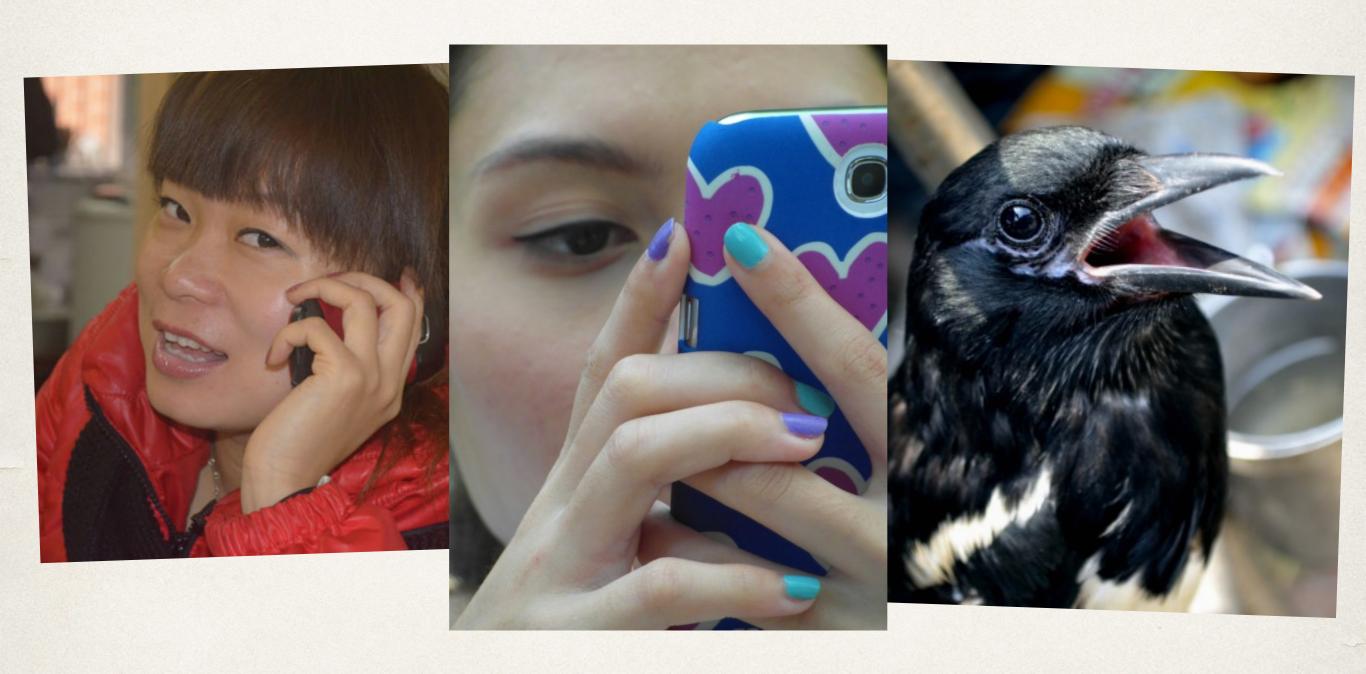


If you do not focus your attention on something, you cannot expect it to reach your long-term memory.

In fact, it will not even enter your short-term memory.

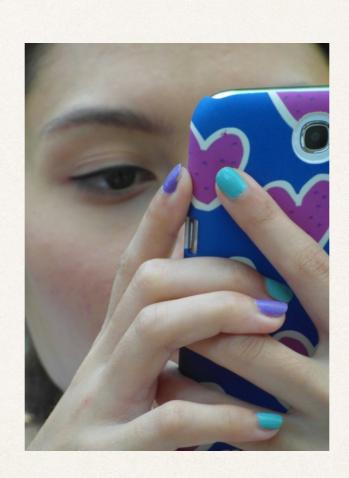
To learn in class, you must therefore be attentive.

Examples of inattention



What causes you to become inattentive in class?







notifications inactivity tiredness

talking

iPad games boredom

lack of system

random
googling

lack of system

passivity

The rest of this presentation will provide advice on how to combat these two causes of inattention.

In order to overcome these two problems, you must:

recognise the importance of attention and therefore...
become an active,
systematic learner

Attention Short-Term Memory

Listen, focus, rehearse, write down, ask and answer questions.

Add Meaning — Long-Term Memory

Be systematic, active and creative
in your note-taking. Use categories,
symbols, examples, analogies,
pictures and quizzes.

Long-Term Memory is founded on

MEANING



Focus attention by reworking and reconstructing what you read and hear...

In the process, you will also add meaning to the new information.

Methods for reworking and reconstructing what you read and hear...



auestion it. Create questions that you can answer from what you have read.

Example: You read: The goals of psychology are to describe, explain, predict and control behaviour.

You ask:

- When might explaining human behaviour be useful?
- ·Why is predicting behaviour important?
- ·What kind of behaviour might a person wish to control?

Put ideas into categories.

Psychology

Study of

- behaviour
- mental states(feelings and thoughts)

Goals

- describe
- explain
- predict
- control

behaviour

Methods

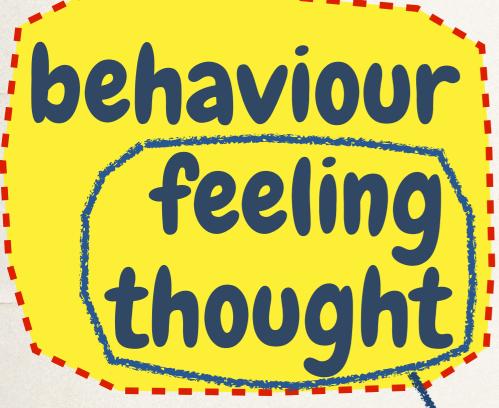
- case study
- experiment
 - •survey/
- questionnaire
 - naturalisticobservation
- correlational study

Use different words to reformulate an idea.

```
behaviour = observable action
feeling = emotion, affect
thought = cognition, belief
```



Highlight the buzz words or key terms.



- behaviour = observable action feeling = emotion, affect thought = cognition, belief
 - > mental states



Think of examples, analogies and symbols.

behaviour /



feeling



anxiety, apprehension

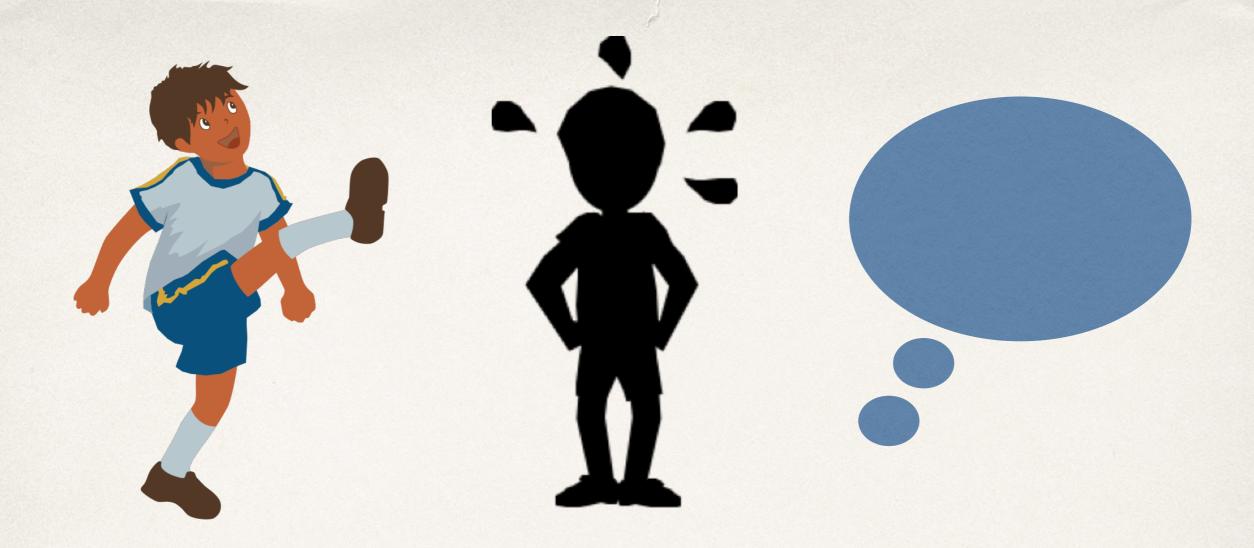
thought



idea, opinion



Each time you think of an example, analogy, symbol, category or synonym, you are focusing on and then reconstructing new knowledge.



This process is called ELABORATION.
It ensures that your new knowledge is well encoded in your memory and more easily retrieved.



behaviour

Make yourself a CHECK QUIZ behaviour | thought | feeling control | predict | describing

a A person with OCD might wish to distressing behaviour. b Intense fear of contamination: e.g. of
c Constant hand-washing: e.g. of
d Person's belief that certain rituals will help protect self or family: e.g. of
e A person determining whether criminals should be paroled might wish to behaviour.
f Note in patient record: Person undertakes from under and species of of

ANSWERS

- a A person with OCD might wish to control distressing behaviour.
- b Intense fear of contamination: e.g. of feeling
- c Constant hand-washing: e.g. of behaviour
- d Person's belief that certain rituals will help protect self or family: e.g. of <u>thought</u>
- e A person determining whether criminals should be paroled might wish to <u>predict</u> behaviour.
- f Note in patient record: Person undertakes frequent compulsive hand-washing: e.g. of describing behaviour





Use note-taking techniques that...

1 add meaning to what you have heard or read

For instance, think of examples to help you understand or visualise a new concept.

Use note-taking techniques that...

help you to understand and remember the material better



For instance, use symbols, diagrams, pictures, tables and mnemonics, not just words.

EXAMPLE: Psychology is the systematic study of...

Behaviours Feelings



•compulsive hand-washing

•anxiety about contamination

Thoughts



belief that
 washing will
 protect one from
 contamination

Use note-taking techniques that...

allow you to notice and focus on the links between ideas and concepts

For instance, use a concept map with links, arrows and branches.



Use note-taking techniques that...

force you to focus on the key terms or "buzz words"

For instance, keep a running list of these words on the right of your page.

buzz words

Brain Development in Infancy and Adolescence

I <u>Timeline of brain development</u>

- Birth: about 1/4 of adult size; almost all neurons already present
- 6 months: about 1/2 of adult size
- 2 years: about ¾ of adult size
- 6 years: 90-95% of adult size
- Mid-20s: full adult size but some parts still maturing

The genetically programmed development of the brain, which occurs in a predetermined sequence in all humans, is an example of maturation.

2 Myelination

- Myelin is the white insulating sheath that forms around many nerve fibres, allowing increasing speed of neural communication.
- The most intense myelination period is directly after birth.
 Adolescence is also important.
- Sensory and motor areas in the brain are myelinated first.
 Generally, the parts of the brain that are responsible for more complex cognitive functions are myelinated afterwards.

Key Terms

- neuron
- maturation
- myelin
- synapse
- synaptogenesis
- branching of dendrites
- synaptic pruning
- frontal lobes
- prefrontal cortex

Check Quiz

- Formation of new synapses:
- Tiny gap between neurons; site of

Use note-taking techniques that...

require your brain to pose questions and find answers

For instance, write yourself a "check quiz" during most classes.

Place it on the side or at the bottom of each page and use it for quick, structured revision.

Brain Development in Infancy and Adolescence

I <u>Timeline of brain development</u>

- Birth: about 1/4 of adult size; almost all neurons already present
- 6 months: about ½ of adult size
- 2 years: about 34 of adult size
- 6 years: 90-95% of adult size
- Mid-20s: full adult size but some parts still maturing

The genetically programmed development of the brain, which occurs in a predetermined sequence in all humans, is an example of maturation.

2 Myelination

- Myelin is the white insulating sheath that forms around many nerve fibres, allowing increasing speed of neural communication.
- The most intense myelination period is directly after birth.
 Adolescence is also important.
- Sensory and motor areas in the brain are myelinated first.
 Generally, the parts of the brain that are responsible for more complex cognitive functions are myelinated afterwards.

3 Synaptogenesis and synaptic pruning

- The synapse is the point of communication between neurons.
- Messages are passed from axon terminals to dendrites.
- Synaptogenesis refers to the formation of new synapses between the brain's neurons, a process which occurs as the more dendrites and more branches of dendrites grow after birth.

<u>Key Terms</u>

- neuron
- maturation
- myelin
- synapse
- synaptogenesis
- branching of dendrites
- synaptic pruning
- frontal lobes
- prefrontal cortex

Check Quiz

- Formation of new synapses:
- Tiny gap between neurons; site of communication between them:
- nerve cell that transmits neural impulses:
- fatty substance coating the nerve fibre and facilitating

simple revision quiz

Check Quiz - Example

correlational study

case study

experiment naturalistic observation

- a A woman with a rare genetic illness provides details of its effects upon her.
- b Year 11 psychology students are deprived of sleep for one night and their performance in a test is compared with that of students who were not deprived.
- c The link between maximum daily temperature and car accidents is analysed.
- d The flirting behaviour of young singles in a nightclub is investigated.
- e Students fill in a questionnaire by the Department of Education to provide information about their attitudes to school.

Check Quiz - Which research method?

- a A woman with a rare genetic illness provides details of its effects upon her.
- b Year 11 psychology students are deprived of sleep for one night and their performance in a test is compared with that of students who were not deprived.
- c The link between maximum daily temperature and car accidents is analysed.
- d The flirting behaviour of young singles in a nightclub is investigated.
- e Students fill in a questionnaire by the Department of Education to provide information about their attitudes to school.

case study

experiment

correlational study

naturalistic observation

survey

Use note-taking techniques that...

6 lead to a legible and well organised workbook, so that revision is a straightforward and even inviting task.

For instance, use headings, subheadings and dot points; set out your notes clearly with colour coding.



Brain Development in Infancy and Adolescence

l <u>Timeline of brain development</u>

- Birth: about 1/4 of adult size; almost all neurons already present
- 6 months: about ½ of adult size
- 2 years: about 34 of adult size
- 6 years: 90-95% of adult size
- Mid-20s: full adult size but some parts still maturing

The genetically programmed development of the brain, which occurs in a predetermined sequence in all humans, is an example of maturation.

2 Myelination

- Myelin is the white insulating sheath that forms around many nerve fibres, allowing increasing speed of neural communication.
- The most intense myelination period is directly after birth.
 Adolescence is also important.
- Sensory and motor areas in the brain are myelinated first.
 Generally, the parts of the brain that are responsible for more complex cognitive functions are myelinated afterwards.

3 Synaptogenesis and synaptic pruning

- The synapse is the point of communication between neurons.
- Messages are passed from axon terminals to dendrites.
- Synaptogenesis refers to the formation of new synapses between the brain's neurons, a process which occurs as the more dendrites and more branches of dendrites grow after birth.

<u>Key Terms</u>

- neuron
- maturation
- myelin
- synapse
- synaptogenesis
- branching of dendrites
- synaptic pruning
- frontal lobes
- prefrontal cortex

Check Quiz

- Formation of new synapses:
- Tiny gap between neurons; site of communication between them:
- nerve cell that transmits neural impulses:
- fatty substance coating the nerve fibre and facilitating

simple revision quiz

Write legibly.



Be prepared to use a concept map when appropriate.

Brain Development in Infancy and Adolescence

Timeline of brain development

- Birth: about 1/4 of adult size; almost all neurons already present
- 6 months: about 1/2 of adult size
- 2 years: about 34 of adult size
- 6 years: 90-95% of adult size
- Mid-20s: full adult size but some parts still maturing

The genetically programmed development of the brain, which occurs in a predetermined sequence in all humans, is an example of maturation.

2 Myelination

- Myelin is the white insulating sheath that forms around many nerve fibres, allowing increasing speed of neural communication.
- The most intense myelination period is directly after birth.
 Adolescence is also important.
- Sensory and motor areas in the brain are myelinated first.
 Generally, the parts of the brain that are responsible for more

Key Terms

- neuror
- maturation
- myelin
- synapse
- synaptogenesis
- branching of dendrites
- synaptic pruning
- frontal lobes
- prefrontal cortex

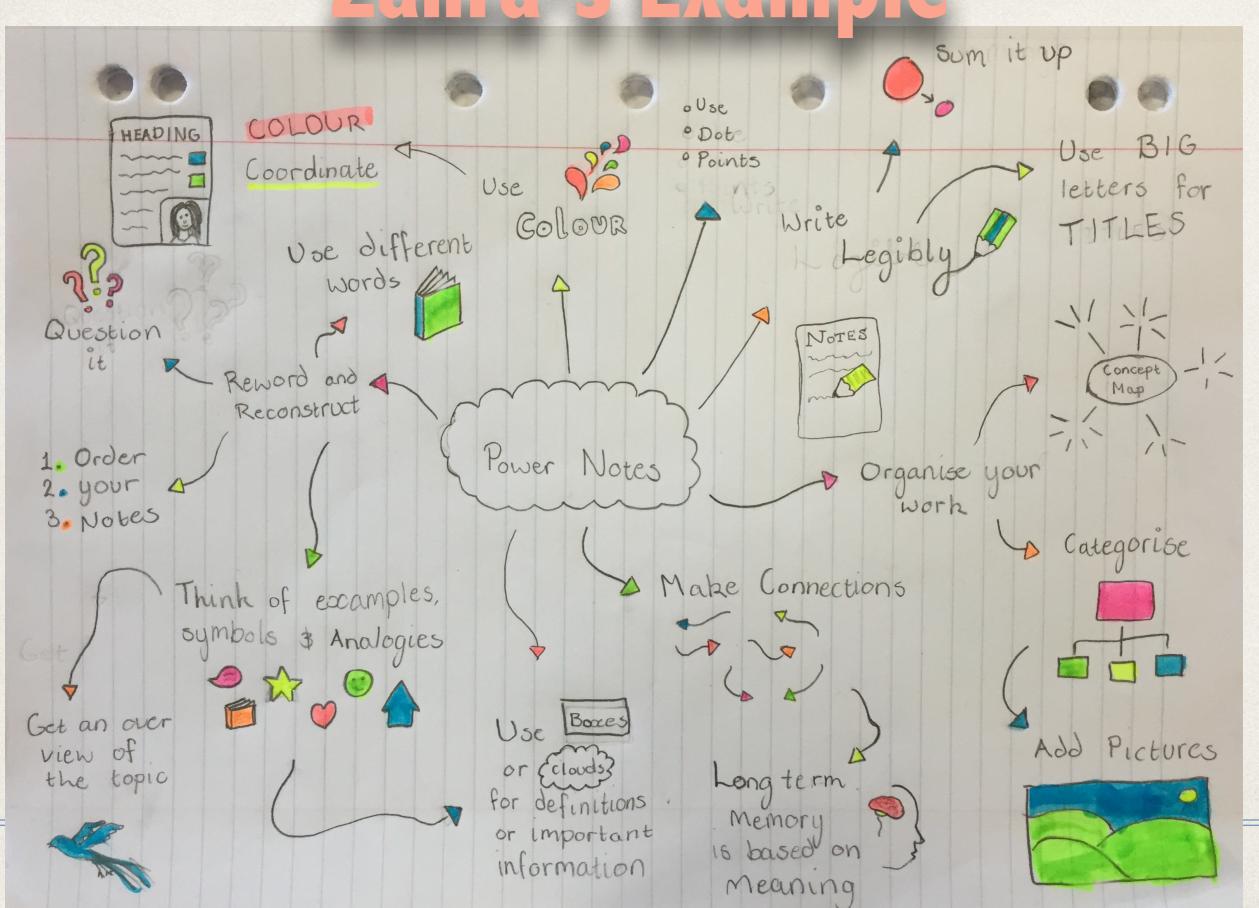
Check Quiz

- Formation of new synapses:
- Tiny ash between

Choose clear, well defined headings and subheadings.



Zahra's Example



Did you pay attention? - Match up Quiz

- 1 Short-term memory requires... a mental states.
- 2 Long-term memory is founded on...
- 3 Feelings and thoughts are...
- 4 A synonym for thought is...
- 5 A research method in psychology is...

b case study.

c belief.

d meaning.

e attention.

Did you pay attention? - Match up Quiz

- 1 A behaviour is a/n...
- 2 Using synonyms, examples and analogies are all methods of...
- 3 A synonym for feeling is...
- 4 Exploring the link between crime and temperature might require a...
 - 5 Observing children at play is an example of...

a affect.

b naturalistic observation.

c elaboration.

d observable action.

e correlational study.