Introduction to Psychology

with hints on learning and note-taking
The Importance of Attention

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.
The Importance of Attention

Attention is like a highlighter that allows you to focus on vital information from your environment and ignore the rest.
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.
Think up questions about what you read.

The goals of psychology are to describe, explain, predict and control behaviour.
Questions:

• 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
- naturalistic observation
- 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  kicking, playing, laughing

feeling  anxiety, apprehension

thought  idea, opinion
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 frequent compulsive hand-washing: e.g. of _________ behaviour
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 thought

e A person determining whether criminals should be paroled might wish to predict behaviour.

f Note in patient record: Person undertakes frequent compulsive hand-washing: e.g. of describing behaviour
Note-Taking Advice

Use symbols, diagrams, pictures, tables and mnemonics, not just words.
EXAMPLE: Psychology is the scientific study of...

Behaviours
- compulsive hand-washing

Feelings
- anxiety about contamination

Thoughts
- belief that washing will protect one from contamination
Note-Taking Advice

Focus on the links between ideas and concepts.
Psychology

- Describing behavior
- Explaining behavior
- Controlling behavior
- Predicting behavior

...has the goals of...

...is the study of...

- Behaviors which can be defined as observable actions
- Thoughts which can also be called cognitions, ideas or beliefs
- Feelings other words for which are affects or emotions

...requires ethical standards that...

- Through the protection of confidentiality
- Through their informed consent
- Who have the right to withdraw from research studies
- Ensure the welfare of research participants
- Who must extend justice to all participants
- Who must recognize that participant welfare is a central priority in all research
- Promote the integrity of researchers
- Through accurate reporting

...involves research through...

- Experiments that allow cause and effect relationships to be established
- Surveys, questionnaires and rating scales
- Naturalistic observation
- Correlational studies that allow the link between two variables to be determined
- Case studies of unusual and uncommon people, illnesses or events
Note-Taking Advice

Focus on the key terms or “buzz words”

For instance, keep a running list of these words on the right of your page.
Brain Development in Infancy and Adolescence

1. Timeline of brain development
   - Birth: about ¼ of adult size; almost all neurons already present
   - 6 months: about ½ 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.

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.

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 communication between them: _______
- nerve cell that transmits neural impulses: _______
- fatty substance coating the nerve fibre and facilitating _______
Write yourself a “check quiz”.

Place it on the side or at the bottom of every second page and use it for quick, structured revision.
Check Quiz - Examples of Research Studies

- **survey**
- **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.  
**case study**

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.  
**experiment**

c The link between maximum daily temperature and car accidents is analysed.  
**correlational study**

d The flirting behaviour of young singles in a nightclub is investigated.  
**naturalistic observation**

e Students fill in a questionnaire by the Department of Education to provide information about their attitudes to school.  
**survey**
Use headings, subheadings and dot points; set out your notes clearly with colour coding.
Brain Development in Infancy and Adolescence

1. 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 3/4 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.
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Key Terms
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- maturation
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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...
Test your attention - Matching Quiz

1. Short-term memory requires... [e] attention.
2. Long-term memory is founded on... [d] meaning.
3. Feelings and thoughts are... [c] belief.
4. A synonym for thought is... [a] mental states.
5. One research method in psychology is carrying out a... [b] case study.
Test your attention - Matching Quiz

1. A behaviour is a/n...  
   a. affect.

2. Establishing a cause-effect relationship between 2 variables requires a/n...  
   b. naturalistic observation.
   c. experiment.
   d. observable action.
   e. correlational study.

3. A synonym for feeling is...  
   a. affect.

4. Exploring the link between crime and temperature might require a...  
   b. naturalistic observation.
   c. experiment.
   d. observable action.
   e. correlational study.

5. Observing children at play is an example of...  
   a. affect.