Ad Astra Biological Sciences

Biology, Human Biology & Psychology
Tackling the Extended Answer Question

• ALL major assessments in Biology, Human Biology and Psychology require an extended answer

• Common terms used in extended answer questions include:
  ▪ Compare
  ▪ Contrast
  ▪ Explain
  ▪ Define
  ▪ Describe
  ▪ Discuss
  ▪ Using biological examples
Tackling the Extended Answer Question

PLAN.... PLAN..... PLAN
BEFORE you begin you MUST PLAN

This should take a couple of minutes to organise your ideas in a logical sequence
You should also list examples you are going to use
Ideas should be facts you have learnt
Biology & Human Biology

• Extended answer questions do NOT need to be an essay
• You do NOT need Introduction, Middle and Conclusion
• You do NOT give YOUR opinion, unless asked (ethics)
Biology & Human Biology

• You DO need to put your ideas in a logical sequence
• You DO need to use specific terms
• You DO need to explain the idea
• You DO need to give examples from class or book
• You DO need to annotate diagrams
Biology & Human Biology

- If it asks to COMPARE – you MUST use a table
- If it asks for examples you MUST give them
- Extended answers are generally a mark a minute. 10 marks = 10 ideas = 10 minutes
- Answers require explanation – writing a word will not get you a mark
- Specific terminology is required
Biology & Human Biology

• Your ideas could:

  • follow the structure used in English
    • Introduction, explanation, examples, tie back

  • be given as dot points
  
  • be written as an annotated diagram
Psychology

- Structure IS important
- Extended answers may be supported by diagrams, tables and graphs and text.
- Citing examples of Psychological theories and research evidence IS important as evidence to support your response
Psychology

• APA referencing:

• When referencing in Psychology, you need to reference all material you have used to create any written documents (investigations, reports, productions etc).

• Psychologists use the referencing method specified by the American Psychological Association (APA). Any study or other publication in psychology will contain in-text reference citations, and a reference list that is at the end of the document.
Psychology

- **Book example:**

- **Journal article example:**

- **Internet sites:**

- **Within documents:**
  - **More than one author:**

    - **First citing:**
      - Short term memory is defined as the second and most active memory system in the multi-store model of memory (van Iersel, Bradley, Coon, Kendall, Stone & Swaminathan, 2011).

    - **Second citing:**
      - Daily sleeping and waking periods create a variety of sleep patterns (van Iersel et al, 2011).
Psychology

• The American Psychological Association
• http://www.apastyle.org
  – Provides all relevant information about referencing and report writing
  – Click the Learning APA Style link for various tutorials
Psychology
• Yr 11 Biology
  - Unit 1- 1 question out of two (20 marks)
  - Unit 2 – 1 question out of two (20 marks)

• Yr 11 Human Biology
  - 2 questions from three (20 marks each)

• Yr 11 Psychology
  - 2 questions (generally 20 or 25 marks)
Task: Biology & Human Biology

• Mitosis and meiosis are two different types of cell division. How are they different and what implications does this have?
<table>
<thead>
<tr>
<th>Mitosis</th>
<th>Meiosis</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 daughter cells</td>
<td>4 daughter cells</td>
<td>1</td>
</tr>
<tr>
<td>Genetically identical offspring</td>
<td>Offspring show variation</td>
<td>2 Mitosis = for asexual reproduction 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meiosis = for sexual reproduction 4</td>
</tr>
<tr>
<td>Diploid daughter cells</td>
<td>Haploid daughter cells</td>
<td>5 Mitosis = suitable for growth and repair 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Meiosis = suitable for gamete production 7</td>
</tr>
<tr>
<td>Happens in somatic cells</td>
<td>In testes/ovaries (in mammals)</td>
<td>8 2 haploid gametes fuse at fertilisation 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>forms a diploid zygote 10</td>
</tr>
</tbody>
</table>
Task: Psychology


- **Arrange this reference correctly**

```plaintext
J. B. Carroll  Carroll, J. B.  Carroll, J.B.  Carroll, J B.


New York: Cambridge University Press.
New York, USA: Cambridge University.
```
The ability to predict the likelihood of criminals returning to crime is vital to those responsible for determining the release and management of offenders (Andrews & Bonta, [ ] Hint). Bonta, Law, and Hanson [ ] Hint assert that it is now possible to accurately assess the risk of offending "especially...when predictions are based on actuarially derived information rather than professional and clinical judgement" (p.124). Measures such as previous offences, age, income and drug or alcohol dependency have been used successfully to predict criminal behaviour ([ ], 2003; Blackburn, 1993; Bonta et al., [ ] Hint Webster & Bailes, 2004). Despite this evidence many violent offenders are still being assessed using professional judgement rather than by actuarial measures (Polaschek [ ] Hint).
References


The ability to predict the likelihood of criminals returning to crime is vital to those responsible for determining the release and management of offenders (Andrews & Bonta, 2003). Bonta, Law, and Hanson (1998) assert that it is now possible to accurately assess the risk of offending "especially...when predictions are based on actuarially derived information rather than professional and clinical judgement" (p.124). Measures such as previous offences, age, income and drug or alcohol dependency have been used successfully to predict criminal behaviour (Andrews & Bonta, 2003; Blackburn, 1993; Bonta et al., 1998; Webster & Bailes, 2004). Despite this evidence many violent offenders are still being assessed using professional judgement rather than by actuarial measures (Polaschek & Reynolds, 2004).