

Powerpoint Handouts as a Revision Tool

Method

- ❑ Students compiled their own summary sheets
- ❑ Maximum of six slides per sheet
- ❑ Limit to five or six bullet points per slide
- ❑ Use of diagrams/graphs where appropriate
- ❑ Class discussion to ensure all important points are included with reference to syllabus

Conclusion

A successful method for revision!

Rational

“We don’t want to be spoon-fed”

| | |
|--|--|
| <p>1</p> <pre> graph TD Observation --> Hypothesis Hypothesis --> Experiment Experiment --> Result Result --> Interpretation Interpretation --> Conclusion Hypothesis --> Theory Theory --> Principle Conclusion --> RejectAcceptChange[Reject Accept Change] RejectAcceptChange --> Hypothesis </pre> | <p>2</p> <ul style="list-style-type: none"> • A hypothesis is an educated guess based on observations • A Theory is an explanation based on repeated hypotheses and experiments • A Principle or law arises from a theory when it is seen to be true under all conditions over a long period of time |
| <p>3 TO ENSURE EXPERIMENT IS SAFE</p> <ul style="list-style-type: none"> • Tie back long hair • Wear safety goggles if necessary • Wear lab coat if necessary • Never place fingers in mouth or eyes unless you have washed hands • Be aware of safety information when using chemicals • Avoid contact with electrical equipment and water | <p>4 PRINCIPLES OF EXPERIMENTATION</p> <ol style="list-style-type: none"> 1. Careful planning and design 2. Ensure experiment is safe 3. Design control experiment 4. Experiments must be fair <ul style="list-style-type: none"> • Sample size (large as possible) • Random selection (keep it varied) • Others must be able to replicate experiment • Double blind testing (real/placebo) |
| <p>5 LIMITATION OF THE VALUE SCIENTIFIC METHOD</p> <ol style="list-style-type: none"> 1. Extent of your knowledge 2. The basis of investigation 3. Interpreting results (Thalidomide drug) 4. Changes in the natural world 5. Accidental discoveries (Sir Alexandar Flemming Penicillin) | <p>6 ETHICAL ISSUES</p> <ul style="list-style-type: none"> • The origin of life • Use of captive animals • Cloning animals • The way in which evolution may have taken place • Organ transplants |

Summary

- ❑ Students believe they learn when writing summaries
- ❑ Ideal for definitions and diagrams
- ❑ Keep one slide for exam questions
- ❑ Two A4 sheets required for some topics - use both sides of the sheet

Student Comments

- ❑ “Colourful. I learn from my own notes”
- ❑ “When writing them it helps, but when reading back over them it’s hard to know how it all fits together”
- ❑ “We want to do our own summary one week after each chapter”