

Biology	Lesson 5 : Who did it? (Forensic Science)			
Curriculum Key:	AQA 10.2; 10.8	OCRA B2	OCRB B1g	Edexcel topic 4
Objective(s) 1. Interpreting information 2. Distinguishing between factual evidence and circumstantial evidence 3. Introduce students to the science of Forensics – DNA fingerprinting, etc		Resources needed: Information sheets: scene of the crime enlarged, DNA profiles, footwear, fingerprints, police report, statements, post-mortem report, conclusion. Envelopes containing the name of either a suspect or the victim. Sheets on genetic fingerprinting. Worksheet: Evidence cards enlarged, concept maps enlarged Post-it notes Computer for extension task		
Starter: 5 minutes In groups of 3-4: students observe the scene of the crime. They write down each potential source on a separate post-it note.		Teacher input/assessment Distribute pictures and post-it notes.		
Main Activity 1: 15-20 minutes In groups of 3-4: Students are given the police report, fingerprints, DNA profiles, statements and footwear. They are given an A3 copy of the evidence cards and required to write down any evidence that may be associated with the suspect or victim. Students must distinguish between factual and circumstantial evidence.		Teacher input / assessment Distribute DNA profiles, footwear, fingerprints, police report, statements and evidence cards.		
Main Activity 2: 15-20 minutes In groups of 3-4, students complete a concept map for each person. The map should include the possible role of the person, using the evidence from Activity 1.		Teacher input / assessment Distribute Concept Maps 1-4.		
Plenary: 5-10 minutes Each group presents the findings of the role of one person (or more if time permits) associated with the crime to the rest of the class. The name of the suspect is given to the group in an envelope. They must include evidence information and distinguish factual from circumstantial. They must conclude whether or not they think the person caused the death of the victim.		Teacher input / assessment Distribute envelopes. Judge the presentations. Following presentation, teacher reads post-mortem report & conclusion.		
Learning Outcomes: All students must: Extract information and display it on the concept maps. Most students should: Solve the crime. Some students could: Design a flow chart to show the process of genetic fingerprinting.				
Key Skills: extracting, interpretation and display of information Key words: circumstantial, factual, evidence Homework: Students design a flowchart to outline how a DNA profile is produced, using the website www.s-cool.co.uk , then select A level and AS level, then Biology, then Applications of Genetic Engineering, then the QuickLearn on Other ways of manipulating genes (if no computers are available, teacher distributes the information sheets on genetic fingerprinting).		Differentiation: More able: students are given the option to design their own worksheets and/or present the information as a PowerPoint presentation if facilities are available. Less able: teacher assists students by reading through the information on I1, I2 and I3. Students use highlighter pens to extract relevant information, with help from teacher, then transfer information on to W1, W2 and W3 either on paper or as a PowerPoint presentation if facilities are available.		