Unit 5- Psychological Evaluations

Content Area: **Science**
Course(s): **Forensic Science**
Time Period: **January**
Length: **10 Blocks**
Status: **Published**

Enduring Understandings

Serology involves a broad scope of laboratory tests that use specific antigen and serum antibody reactions.
Blood type is an inherited trait that is a permanent feature of a person's biological makeup.
Forensic psychologists or psychiatrists assess an individual's competence to stand trial.
Psychologists determine if a mental illness mitigates a suspect's responsibility for his or her actions.

Essential Questions

What is blood and how is it analyzed by forensic investigators?
How can forensic scientists use body fluids to solve a crime?
How do human behavior and mental illness relate to matters of civil and criminal law?

Content

Vocabulary
Agglutination
Allele
Antibody
Antigen
Antiserum
Enzyme
Hemoglobin
Aggression
Antisocial personality
Automatism
Behavior modification
Child abuse
Cognitive dissonance
Criminal behavior profiling
Depersonalization
Deviant
Familicide
Modus operandi

Skills

List the A-B-O antigens and antibodies found in the blood for each of the four blood types: A, B, AB and O
Understand and describe how whole blood is typed
List and describe forensic tests used to characterize a stain as blood
List the laboratory tests necessary to characterize seminal stains
Describe the proper collection of physical evidence in a rape investigation
Define the role of the forensic psychiatric professional
Differentiate forensic psychiatry from clinical psychiatry
Identify tests used for psychiatric assessment
Analyze techniques used to deal with deception
Assess competence and sanity
Profile the perpetrator and the victim
Define the killer's domain

Resources

- Teacher's Wraparound Edition for Forensic Science: An Introduction, 2nd Edition

  Richard Saferstein, Forensic Science Consultant ©2011 |Prentice Hall

- Instructor's Manual with Lesson Plans for Forensic Science: An Introduction, 2nd Edition

  Richard Saferstein, Forensic Science Consultant ©2011 |Prentice Hall

- Basic Laboratory Exercises for Forensic Science: An Introduction, 2nd Edition

  Richard Saferstein, Forensic Science Consultant ©2011 |Prentice Hall

- Forensic Science Experiments (Facts on File Science Experiments) Hardcover – October 1, 2009

  by Pamela Walker (Author), Elaine Wood (Author)

- Forensic Science Experiments on File (Facts on File Science Library) Ring-bound

- Crime Scene Investigations: Real-Life Science Labs For Grades 6-12

  by Pam Walker, Elaine Wood, Christopher Stone (Illustrator)

Assessments

Project: Personal
Project: Serial Killers Students will CHOOSE a serial killer to research. They will profile both the serial killer and the victims, identify the killer's domain and describe the data used by law enforcement to identify the perpetrator.

Standards

SEP.1	Asking Questions and Defining Problems
CCC.1	Patterns.
	Observed patterns in nature guide organization and classification and prompt questions about relationships and causes underlying them.
SEP.1.a	Ask questions
SEP.1.a.1	that arise from careful observation of phenomena, or unexpected results, to clarify and/or seek additional information.
CCC.2	Cause and effect: Mechanism and explanation.
SEP.1.a.2	that arise from examining models or a theory, to clarify and/or seek additional information and relationships.
	Events have causes, sometimes simple, sometimes multifaceted. A major activity of science is investigating and explaining causal relationships and the mechanisms by which they are mediated. Such mechanisms can then be tested across given contexts and used to predict and explain events in new contexts.
SEP.2	Developing and Using Models
SEP.3.d	Select appropriate tools to collect, record, analyze, and evaluate data.
LA.SL.11-12	Speaking and Listening
LA.SL.11-12.4	Present information, findings and supporting evidence clearly, concisely, and logically. The content, organization, development, and style are appropriate to task, purpose, and audience.
LA.SL.11-12.5	Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.
SCI.9-12.1.4	Mathematical representations are needed to identify some patterns.
SCI.9-12.1.5	Empirical evidence is needed to identify patterns.