

Inquiry Investigations™
Forensic Science MODULE - 1013062
Grades: 7-10

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 www.freyscientific.com/inquiryinvestigations

Illinois Learning Standards
Science
Grade 7

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| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.A. | Know and apply the concepts, principles and processes of scientific inquiry. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.3a. | Formulate hypotheses that can be tested by collecting data. <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.3b. | Conduct scientific experiments that control all but one variable. <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating |

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| | | <p>Headlamp</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3c.</p> | <p>Collect and record data accurately using consistent measuring and recording techniques and media.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent |

Fingerprints on Smooth Surfaces

- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
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- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3d.</p> | <p>Explain the existence of unexpected results in a data set.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing |

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| | | <p>Genetic Analysis using DNA Profile Frequency Calculations</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic |
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| | | <p>Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3e.</p> | <p>Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Simulating DNA Analysis |

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| | | <ul style="list-style-type: none"> • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3f.</p> | <p>Interpret and represent results of analysis to produce findings.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a |

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| | | <p>Hair and Fiber Collection</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3g.</p> | <p>Report and display the process and results of a scientific investigation.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent |

Fingerprints on Paper

- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
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- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.B. | Know and apply the concepts, principles and processes of technological design. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.B.3a. | <p>Identify an actual design problem and establish criteria for determining the success of a solution.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line |
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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.3b.</p> | <p>Sketch, propose and compare design solutions to the problem considering available materials, tools, cost effectiveness and safety.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned |

Parentage

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- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
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- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
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- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar

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| | | <p>Letter T</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.3e.</p> | <p>Evaluate the test results based on established criteria, note sources of error and recommend improvements.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage |

- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.3f.</p> | <p>Using available technology, report the relative success of the design based on the test results and criteria.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling |

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| | | <p>a DNA Profile</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel |
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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.12. | Concepts and Principles: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences. |
| STATE GOAL / LEARNING STANDARD | 12.A. | Know and apply concepts that explain how living things function, adapt and change. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.3a. | <p>Explain how cells function as building blocks of organisms and describe the requirements for cells to live.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.3b. | <p>Compare characteristics of organisms produced from a single parent with those of organisms produced by two parents.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Teacher Resource CD: Simulating DNA Analysis |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.3c. | Compare and contrast how different forms and structures reflect different functions (e.g., similarities and differences among animals that fly, walk or swim; structures of plant cells and animal cells). |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.12. | Concepts and Principles: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences. |
| STATE GOAL / LEARNING STANDARD | 12.C. | Know and apply concepts that describe properties of matter and energy and the interactions between them. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.C.3a. | <p>Explain interactions of energy with matter including changes of state and conservation of mass and energy.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| STATE GOAL / STRAND | IL.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |
| STATE GOAL / LEARNING STANDARD | 13.A. | Know and apply the accepted practices of science. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.A.3a. | <p>Identify and reduce potential hazards in science activities (e.g., ventilation, handling chemicals).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged |

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| | | <p>Fingerprint</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| STATE GOAL / STRAND | L.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |
| STATE GOAL / LEARNING STANDARD | 13.B. | Know and apply concepts that describe the interaction between science, technology and society. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.B.3a. | <p>Identify and explain ways that scientific knowledge and economics drive technological development.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis |
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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>13.B.3d.</p> | <p>Analyze the interaction of resource acquisition, technological development and ecosystem impact (e.g., diamond, coal or gold mining; deforestation).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap |

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| | | <p>Door</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis |
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Illinois Learning Standards

Science

Grade 8

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| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.A. | Know and apply the concepts, principles and processes of scientific inquiry. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.3a. | <p>Formulate hypotheses that can be tested by collecting data.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.3b. | <p>Conduct scientific experiments that control all but one variable.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar |

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| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3c.</p> | <p>Collect and record data accurately using consistent measuring and recording techniques and media.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile |

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- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
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- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
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- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing

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| | | <p>Paper Analysis Skills</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3d.</p> | <p>Explain the existence of unexpected results in a data set.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human |

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| | | <p>Blood Group Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3e.</p> | <p>Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Simulating DNA Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3f.</p> | <p>Interpret and represent results of analysis to produce findings.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 2: |

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| | | <p>Identifying Fingerprint Ridge Details</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket |
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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.3g.</p> | <p>Report and display the process and results of a scientific investigation.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis |

- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing

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| | | <p>Handwriting Analysis Skills</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.B. | Know and apply the concepts, principles and processes of technological design. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.B.3a. | <p>Identify an actual design problem and establish criteria for determining the success of a solution.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer |

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| | | <p>Look at STR Polymorphisms</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills |
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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.3b.</p> | <p>Sketch, propose and compare design solutions to the problem considering available materials, tools, cost effectiveness and safety.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing |
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| | | <p>Writing Inks</p> <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Analyzing Writing Inks • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Learning About Paper • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Silent Sentinel • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.3e.</p> | <p>Evaluate the test results based on established criteria, note sources of error and recommend improvements.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing |

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| | | <p>Genetic Analysis using DNA Profile Frequency Calculations</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks |
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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.3f.</p> | <p>Using available technology, report the relative success of the design based on the test results and criteria.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light |

- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks
- Forensic Science: Unit 6 Activity 1: Toxicological Analysis
- Forensic Science: Unit 6 Activity 2: Chromatographic Analysis
- Forensic Science: Unit 6 Activity 3: Fingerprint Analysis
- Forensic Science: Unit 6 Activity 4: Document Analysis
- Forensic Science: Unit 6 Activity 5: Blood Analysis

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| | | <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.12. | Concepts and Principles: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences. |
| STATE GOAL / LEARNING STANDARD | 12.A. | Know and apply concepts that explain how living things function, adapt and change. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.3a. | <p>Explain how cells function as building blocks of organisms and describe the requirements for cells to live.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Simulating DNA Analysis |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.3b. | <p>Compare characteristics of organisms produced from a single parent with those of organisms produced by two parents.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Teacher Resource CD: Simulating DNA Analysis |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.3c. | <p>Compare and contrast how different forms and structures reflect different functions (e.g., similarities and differences among animals that fly, walk or swim; structures of plant cells and animal cells).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying |

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| | | <p>the Kastle-Meyer Test for the Presence of Blood</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Simulating DNA Analysis • Teacher Resource CD: The Case of the Telling Blood Group • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.12. | Concepts and Principles: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences. |
| STATE GOAL / LEARNING STANDARD | 12.C. | Know and apply concepts that describe properties of matter and energy and the interactions between them. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.C.3a. | <p>Explain interactions of energy with matter including changes of state and conservation of mass and energy.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| STATE GOAL / STRAND | IL.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |
| STATE GOAL / LEARNING STANDARD | 13.A. | Know and apply the accepted practices of science. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.A.3a. | <p>Identify and reduce potential hazards in science activities (e.g., ventilation, handling chemicals).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| STATE GOAL / STRAND | IL.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |

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| STATE GOAL / LEARNING STANDARD | 13.B. | Know and apply concepts that describe the interaction between science, technology and society. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.B.3a. | <p>Identify and explain ways that scientific knowledge and economics drive technological development.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>13.B.3d.</p> | <p>Analyze the interaction of resource acquisition, technological development and ecosystem impact (e.g., diamond, coal or gold mining; deforestation).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark |

- Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint
- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis |
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**Illinois Learning Standards
Science
Grade 9**

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| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.A. | Know and apply the concepts, principles and processes of scientific inquiry. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4a. | Formulate hypotheses referencing prior research and knowledge. <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4b. | Conduct controlled experiments or simulations to test hypotheses. <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary |

Fingerprint

- Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint
- Forensic Science: Unit 1 Case Activity 3: The Paper Mark
- Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint
- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.4c.</p> | <p>Collect, organize and analyze data accurately and precisely.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint |

- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned

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| | | <p>Lottery Ticket</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.4d.</p> | <p>Apply statistical methods to the data to reach and support conclusions.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Teacher Resource CD: Simulating DNA Analysis |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.4e.</p> | <p>Formulate alternative hypotheses to explain unexpected results.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: |
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| | | <p>Demonstrating Locard's Principle</p> <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4f. | <p>Using available technology, report, display and defend to an audience conclusions drawn from investigations.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door |
| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.B. | Know and apply the concepts, principles and processes of technological design. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.B.4c. | <p>Develop working visualizations of the proposed solution designs (e.g., blueprints, schematics, flowcharts, cad-cam, animations).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 2 Case Activity 1: The Questioned |

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| | | <p>Parentage</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.4.e.</p> | <p>Develop and test a prototype or simulation of the solution design using available materials, instruments and technology.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.4.g.</p> | <p>Using available technology, report to an audience the relative success of the design based on the test results and criteria.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: |

Identifying Fingerprint Ridge Details

- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.12. | Concepts and Principles: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences. |
| STATE GOAL / LEARNING STANDARD | 12.A. | Know and apply concepts that explain how living things function, adapt and change. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.4a. | <p>Explain how genetic combinations produce visible effects and variations among physical features and cellular functions of organisms.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms |

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| | | <ul style="list-style-type: none"> Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles Teacher Resource CD: Simulating DNA Analysis |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.4b. | <p>Describe the structures and organization of cells and tissues that underlie basic life functions including nutrition, respiration, cellular transport, biosynthesis and reproduction.</p> <ul style="list-style-type: none"> Forensic Science: Unit 2 Case Activity 3: The Telling Tissue Teacher Resource CD: Simulating DNA Analysis |
| STATE GOAL / STRAND | IL.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |
| STATE GOAL / LEARNING STANDARD | 13.A. | Know and apply the accepted practices of science. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.A.4a. | <p>Estimate and suggest ways to reduce the degree of risk involved in science activities.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint Forensic Science: Unit 1 Case Activity 3: The Paper Mark Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.A.4b. | <p>Assess the validity of scientific data by analyzing the results, sample set, sample size, similar previous experimentation, possible misrepresentation of data presented and potential sources of error.</p> <ul style="list-style-type: none"> Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint Forensic Science: Unit 1 Case Activity 3: The Paper Mark Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper |

- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>13.A.4c.</p> | <p>Describe how scientific knowledge, explanations and technological designs may change with new information over time (e.g., the understanding of DNA, the design of computers).</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>13.A.4d.</p> | <p>Explain how peer review helps to assure the accurate use of data and improves the scientific process.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second |

Examination

- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
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- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |
| STATE GOAL / LEARNING STANDARD | 13.B. | Know and apply concepts that describe the interaction between science, technology and society. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.B.4a. | <p>Compare and contrast scientific inquiry and technological design as pure and applied sciences.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing |
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| | | <p>Handwriting Analysis Skills</p> <ul style="list-style-type: none"> • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
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**Illinois Learning Standards
Science
Grade 10**

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| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.A. | Know and apply the concepts, principles and processes of scientific inquiry. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4a. | <p>Formulate hypotheses referencing prior research and knowledge.</p> <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4b. | <p>Conduct controlled experiments or simulations to test hypotheses.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard |

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- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.A.4c.</p> | <p>Collect, organize and analyze data accurately and precisely.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap |

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- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood
- Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns
- Forensic Science: Unit 4 Case Activity 1: The Artist's Brush
- Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment
- Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp
- Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve
- Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread
- Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection
- Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast
- Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle
- Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective
- Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns
- Forensic Science: Unit 5 Case Activity 1: The Curious Line
- Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T
- Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket
- Forensic Science: Unit 5 Case Activity 4: The Careless Forger
- Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel
- Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills
- Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks
- Forensic Science: Unit 6 Activity 1: Toxicological Analysis
- Forensic Science: Unit 6 Activity 2: Chromatographic Analysis
- Forensic Science: Unit 6 Activity 3: Fingerprint Analysis
- Forensic Science: Unit 6 Activity 4: Document Analysis
- Forensic Science: Unit 6 Activity 5: Blood Analysis
- Teacher Resource CD: Fingerprinting
- Teacher Resource CD: Trace Evidence
- Virtual Laboratory: ABO-Rh Blood Typing

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| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4d. | <p>Apply statistical methods to the data to reach and support conclusions.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Teacher Resource CD: Simulating DNA Analysis |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4e. | <p>Formulate alternative hypotheses to explain unexpected results.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic |

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| | | <p>Analysis of DNA Profiles</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic |
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| | | <p>Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.A.4f. | <p>Using available technology, report, display and defend to an audience conclusions drawn from investigations.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door |
| STATE GOAL / STRAND | IL.11. | Inquiry and Design: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems. |
| STATE GOAL / LEARNING STANDARD | 11.B. | Know and apply the concepts, principles and processes of technological design. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.B.4c. | <p>Develop working visualizations of the proposed solution designs (e.g., blueprints, schematics, flowcharts, cad-cam, animations).</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 11.B.4e. | <p>Develop and test a prototype or simulation of the solution design using available materials, instruments and technology.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>11.B.4g.</p> | <p>Using available technology, report to an audience the relative success of the design based on the test results and criteria.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms |

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing |
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| | | <p>Writing Inks</p> <ul style="list-style-type: none"> • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.12. | Concepts and Principles: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences. |
| STATE GOAL / LEARNING STANDARD | 12.A. | Know and apply concepts that explain how living things function, adapt and change. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.4a. | <p>Explain how genetic combinations produce visible effects and variations among physical features and cellular functions of organisms.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles • Teacher Resource CD: Simulating DNA Analysis |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 12.A.4b. | <p>Describe the structures and organization of cells and tissues that underlie basic life functions including nutrition, respiration, cellular transport, biosynthesis and reproduction.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Teacher Resource CD: Simulating DNA Analysis |
| STATE GOAL / STRAND | IL.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |
| STATE GOAL / LEARNING STANDARD | 13.A. | Know and apply the accepted practices of science. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.A.4a. | <p>Estimate and suggest ways to reduce the degree of risk involved in science activities.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged |

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| | | <p>Fingerprint</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>13.A.4b.</p> | <p>Assess the validity of scientific data by analyzing the results, sample set, sample size, similar previous experimentation, possible misrepresentation of data presented and potential sources of error.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying |

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| | | <p>the Precipitin Test for the Presence of Human Blood</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.A.4c. | Describe how scientific knowledge, explanations and technological designs may change with new information over time (e.g., the understanding of DNA, the design of computers). |

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| | | <ul style="list-style-type: none"> • Teacher Resource CD: Fingerprinting |
| <p>LEARNING STANDARD / PERFORMANCE DESCRIPTOR</p> | <p>13.A.4d.</p> | <p>Explain how peer review helps to assure the accurate use of data and improves the scientific process.</p> <ul style="list-style-type: none"> • Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint • Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint • Forensic Science: Unit 1 Case Activity 3: The Paper Mark • Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint • Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag • Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint • Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details • Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills • Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces • Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper • Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors • Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage • Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard • Forensic Science: Unit 2 Case Activity 3: The Telling Tissue • Forensic Science: Unit 2 Case Activity 4: The Second Examination • Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile • Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis • Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms • Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations • Forensic Science: Unit 3 Case Activity 1: The Stain in Question • Forensic Science: Unit 3 Case Activity 2: The Glowing Light • Forensic Science: Unit 3 Case Activity 3: The False Positive • Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group • Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door • Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood • Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood • Forensic Science: Unit 3 Skill Learning Activity 3: Human |

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| | | <p>Blood Group Analysis</p> <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Virtual Laboratory: ABO-Rh Blood Typing |
| STATE GOAL / STRAND | IL.13. | Science, Technology, and Society: Understand the relationships among science, technology and society in historical and contemporary contexts. |
| STATE GOAL / LEARNING STANDARD | 13.B. | Know and apply concepts that describe the interaction between science, technology and society. |
| LEARNING STANDARD / PERFORMANCE DESCRIPTOR | 13.B.4a. | Compare and contrast scientific inquiry and technological design as pure and applied sciences. |

- Forensic Science: Unit 1 Case Activity 1: The Solitary Fingerprint
- Forensic Science: Unit 1 Case Activity 2: The Forged Fingerprint
- Forensic Science: Unit 1 Case Activity 3: The Paper Mark
- Forensic Science: Unit 1 Case Activity 4: The Confusing Fingerprint
- Forensic Science: Unit 1 Case Activity 5: The Black Plastic Bag
- Forensic Science: Unit 1 Skill Learning Activity 1: Taking a Direct Fingerprint
- Forensic Science: Unit 1 Skill Learning Activity 2: Identifying Fingerprint Ridge Details
- Forensic Science: Unit 1 Skill Learning Activity 3: Practicing Fingerprint Identification Skills
- Forensic Science: Unit 1 Skill Learning Activity 4: Latent Fingerprints on Smooth Surfaces
- Forensic Science: Unit 1 Skill Learning Activity 5: Latent Fingerprints on Paper
- Forensic Science: Unit 1 Skill Learning Activity 6: Exposing Latent Fingerprints Using Vapors
- Forensic Science: Unit 2 Case Activity 1: The Questioned Parentage
- Forensic Science: Unit 2 Case Activity 2: The Uncommon Outlaw - Thomas Howard
- Forensic Science: Unit 2 Case Activity 3: The Telling Tissue
- Forensic Science: Unit 2 Case Activity 4: The Second Examination
- Forensic Science: Unit 2 Skill Learning Activity 1: Modeling a DNA Profile
- Forensic Science: Unit 2 Skill Learning Activity 2: The Discarded Cigarette - RFLP Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 3: The Bloody Cloth - DNA Profile Analysis
- Forensic Science: Unit 2 Skill Learning Activity 4: A Closer Look at STR Polymorphisms
- Forensic Science: Unit 2 Skill Learning Activity 5: Practicing Genetic Analysis using DNA Profile Frequency Calculations
- Forensic Science: Unit 2 Skill Learning Activity 6: Genetic Analysis of DNA Profiles
- Forensic Science: Unit 3 Case Activity 1: The Stain in Question
- Forensic Science: Unit 3 Case Activity 2: The Glowing Light
- Forensic Science: Unit 3 Case Activity 3: The False Positive
- Forensic Science: Unit 3 Case Activity 4: The Telling Blood Group
- Forensic Science: Unit 3 Case Activity 5: The Telling Trap Door
- Forensic Science: Unit 3 Skill Learning Activity 1: Applying the Kastle-Meyer Test for the Presence of Blood
- Forensic Science: Unit 3 Skill Learning Activity 2: Applying the Precipitin Test for the Presence of Human Blood
- Forensic Science: Unit 3 Skill Learning Activity 3: Human Blood Group Analysis
- Forensic Science: Unit 3 Skill Learning Activity 4: Detecting Trace Amounts of Blood

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| | | <ul style="list-style-type: none"> • Forensic Science: Unit 3 Skill Learning Activity 5: Analyzing Bloodstain Patterns • Forensic Science: Unit 4 Case Activity 1: The Artist's Brush • Forensic Science: Unit 4 Case Activity 2: The Unusual Fragment • Forensic Science: Unit 4 Case Activity 3: The Incriminating Headlamp • Forensic Science: Unit 4 Case Activity 4: The Torn Sleeve • Forensic Science: Unit 4 Case Activity 5: The Fraudulent Thread • Forensic Science: Unit 4 Skill Learning Activity 1: Making a Hair and Fiber Collection • Forensic Science: Unit 4 Skill Learning Activity 2: Making an Impression Cast • Forensic Science: Unit 4 Skill Learning Activity 3: Demonstrating Locard's Principle • Forensic Science: Unit 4 Skill Learning Activity 4: Learning to be a Layer Detective • Forensic Science: Unit 4 Skill Learning Activity 5: Learning About Fabrics and Weave Patterns • Forensic Science: Unit 5 Case Activity 1: The Curious Line • Forensic Science: Unit 5 Case Activity 2: The Peculiar Letter T • Forensic Science: Unit 5 Case Activity 3: The Questioned Lottery Ticket • Forensic Science: Unit 5 Case Activity 4: The Careless Forger • Forensic Science: Unit 5 Case Activity 5: Case of the Hudson Doggerel • Forensic Science: Unit 5 Skill Learning Activity 1: Practicing Paper Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 2: Practicing Handwriting Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 3: Practicing Altered Document Analysis Skills • Forensic Science: Unit 5 Skill Learning Activity 4: Analyzing Writing Inks • Forensic Science: Unit 6 Activity 1: Toxicological Analysis • Forensic Science: Unit 6 Activity 2: Chromatographic Analysis • Forensic Science: Unit 6 Activity 3: Fingerprint Analysis • Forensic Science: Unit 6 Activity 4: Document Analysis • Forensic Science: Unit 6 Activity 5: Blood Analysis • Teacher Resource CD: Fingerprinting • Teacher Resource CD: Trace Evidence • Virtual Laboratory: ABO-Rh Blood Typing |
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