

SOC Analyst Simulation

Enterprise Incident Response Worksheet (Grades 9-12)

Name: _____ Date: _____

Role: _____ Team: _____

Mission Briefing

Organization: TechCorp Industries (2,500 employees, hybrid cloud)

Your Role: SOC Team, 7AM-3PM shift

Alert: SentinelAI has flagged CRITICAL alerts requiring human analysis and authorization.

Phase 1: Initial Triage (10 minutes)

Evidence Package Review

My assigned evidence package: ☐ A: Network ☐ B: Auth ☐ C: Endpoint ☐ D: Threat Intel ☐ E: Business

Key indicators I identified:

Indicator	Significance	MITRE ATT&CK Mapping
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Initial assessment:

SentinelAI Consultation

Query submitted:

AI analysis summary:

Confidence level: _____% **Limitations acknowledged:**

Critical Decision: Endpoint Isolation

SentinelAI recommends: Full isolation of 47 manufacturing workstations

Business impact: _____

Risk if delayed: _____

My recommendation: ☐ Full isolation ☐ Partial ☐ Monitor only

Rationale:

Phase 2: Analysis and Scoping (15 minutes)**Attack Timeline Construction**

Time	Event	Source	Significance
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Attack Chain Analysis**Initial Access:**

Execution:

Persistence:

Lateral Movement:

Collection/Exfiltration:

Scope Assessment**Patient Zero:** _____**Attack Vector:** _____**Systems Compromised:** _____**Data at Risk:** _____**Attribution Confidence:** ☐ High ☐ Medium ☐ Low**Likely Threat Actor:** _____**Phase 3: Response Execution (15 minutes)****Critical Decisions Matrix**

Decision	Options	AI Input	Business Impact	Our Choice	Rationale
Endpoint Isolation	Full/Partial/None				
Network Segmentation	Activate/Monitor				
Credential Reset	Immediate/Scheduled				
Law Enforcement	Notify/Wait				
Executive Escalation	Now/After containment				

Complication Management

Complication #1:

- Event: _____
- Impact on plan: _____
- Adaptation: _____

Complication #2:

- Event: _____
- Impact on plan: _____
- Adaptation: _____

Phase 4: Communications (10 minutes)

Executive Flash Report

TO: CEO, CISO **FROM:** SOC Team **RE:** Security Incident - CRITICAL

Summary:

Current Status:

Business Impact:

Immediate Actions Taken:

Next Steps:

Operations Notification Draft

TO: Manufacturing VP **RE:** System Availability

Phase 5: After-Action Review

AI Partnership Evaluation

Where SentinelAI excelled:

Where human judgment was essential:

Decisions where AI and humans disagreed:

How we resolved disagreements:

Individual Role Reflection

My contribution to team response:

Skills I used from my Work Role:

What I would do differently:

Career Connection

This simulation relates to these NICE Framework Work Roles:

Required certifications for these careers:

What interested me most about this work:

Questions I have about SOC careers:

From “True Teamwork: Building Human-AI Partnerships” — NICE K12 2025 Dr. Ryan Straight, University of Arizona • ryanstraight@arizona.edu