

# 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:**

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

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

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**Execution:**

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**Persistence:**

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**Lateral Movement:**

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**Collection/Exfiltration:**

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**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:

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#### Current Status:

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#### Business Impact:

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#### Immediate Actions Taken:

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#### Next Steps:

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### Operations Notification Draft

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

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## Phase 5: After-Action Review

### AI Partnership Evaluation

#### Where SentinelAI excelled:

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#### Where human judgment was essential:

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#### Decisions where AI and humans disagreed:

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#### How we resolved disagreements:

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**Individual Role Reflection**

**My contribution to team response:**

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**Skills I used from my Work Role:**

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**What I would do differently:**

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**Career Connection**

**This simulation relates to these NICE Framework Work Roles:**

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**Required certifications for these careers:**

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**What interested me most about this work:**

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**Questions I have about SOC careers:**

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