



MAJESTIC CAVERNS
Sixth Grade Academic Field Experience Packet

Geological Evidence Organizer

(Claim – Evidence – Reasoning)

Aligned to Alabama Science Standard 6.5

Objective:

Use observable geological evidence to explain how Earth's processes shape the landscape over time.

Claim

What geological process shaped the feature you observed in the cavern?

(Examples: chemical weathering, erosion, deposition, tectonic activity)

Evidence

What observable data supports your claim?

(Describe rock formations, layering, mineral deposits, erosion patterns, etc.)

Reasoning

Explain how your evidence supports your claim.

How does the process you identified create the features you observed?

Plate Motion & Fossil Distribution Data Analysis

Aligned to Alabama Science Standard 6.6

Objective:

Analyze fossil and rock evidence to explain past plate movements.

Part A: Fossil Evidence Analysis

1. What similarities exist between fossils found on separate continents?

2. What does this suggest about past continental positions?

3. Why might marine fossils be found far inland today?

Part B: Rock Layer Analysis

1. How can rock layer patterns help scientists understand earth's history?

2. How might tectonic movement or erosion change the position of rock layers over time?

3. What additional evidence would strengthen your explanation of plate motion?

Industrial Innovation Cause & Effect Organizer

Aligned to Alabama Social Studies Standard 6.1B

Objective:

Evaluate how innovation influenced economic and cultural change in the early 1900s.

Choose one inventor or innovation from the early 20th century.

Inventor / Innovation:

Economic Impact

How did this innovation change production, transportation, labor, or trade?

Cultural / Social Impact

How did this innovation affect daily life, communication, or society?

Systems Thinking Reflection

How did this invention contribute to long-term economic or cultural transformation?

Influential Figures Comparative Analysis

Aligned to Alabama Social Studies Standard 6.1C

Objective:

Analyze how individuals influenced broader social change.

Choose two influential women from the early 1900s.

Figure 1: _____

Figure 2: _____

Challenges Faced

What barriers did each individual encounter?

Figure 1: _____

Figure 2: _____

Contributions to Change

How did each individual influence society?

Figure 1: _____

Figure 2: _____

Evidence of Impact

What evidence demonstrates their influence?

Comparative Reflection

How did these individuals help reshape cultural expectations in America?

Post-Visit Evidence Reflection

After your visit to Majestic Caverns, respond to the following:

1. What geological evidence did you observe that demonstrates long-term Earth processes?

2. How does fossil or rock data help scientists reconstruct Earth's history?

3. How are natural systems and human systems similar in the way they change over time?

4. Why is evidence important when explaining both scientific and historical events?
