

# **CW#10: & The Scientific Method**

## **APPLICATION**

**Now that you understand the basic ideas of the SCIENTIFIC METHOD, you will be required to APPLY that understanding to another Mythbuster Episode to:**

- **Identify SPECIFIC examples for each step**
- **Identify SPECIFIC CONNECTIONS to the Scientific Method Cycle**

**WHILE VIEWING: Use the green sheet provided to complete the task**

**CONTINUE THIS CLASSWORK BY SETTING UP A NEW  
SET OF 7 STEPS**

**CW#10 MYTHBUSTERS SCI METHOD~APPLICATION**

1. PROBLEM:

2. BACKGROUND INFORMATION:

3. HYPOTHESIS

4. DESIGN AN EXPERIMENT

5. PERFORM EXPERIMENT AND GATHER RESULTS

6. ADJUST, REDO OR DESIGN A NEW TEST

7. MAKE A CONCLUSION

# AS YOU WATCH THIS SEGMENT, IDENTIFY:



- 1) **PROBLEM:** Write a “CAUSE & EFFECT” testable question about their penny test (If needed, use your “SCIENCE EXPERIMENT GUIDEBOOK”—PAGE 13 in your notebook to help you)



## **2) RESEARCH/BACKGROUND INFORMATION:**

List **AT LEAST 5 FACTS** (scientific & verifiable, **NOT** opinions or hearsay) given in the video



# VIDEO #1



### 3. HYPOTHESIS:

Write an “IF...THEN...BECAUSE” statement that answers your “testable question” (PROBLEM)

**\*\*HINT\*\***

**IF a penny is dropped from the top of the Empire State Building,  
THEN...BECAUSE...**

# AS YOU WATCH THESE NEXT 2 SEGMENTS:

## 4) DESIGN AN EXPERIMENT:

- Determine the *MANIPULATED VARIABLE*
- Determine the *RESPONDING VARIABLE*
- List the *CONTROLLED VARIABLES*  
(EVERYTHING they kept constant)
- What tools do they use during the experiment?

# VIDEO #2





# VIDEO #3



**AS YOU WATCH THIS NEXT SEGMENT:**

**5) PERFORM EXPERIMENT AND GATHER RESULTS:**

- What were the results of their FIRST experiment?

## 6) ADJUST, REDO, OR DESIGN A NEW TEST:

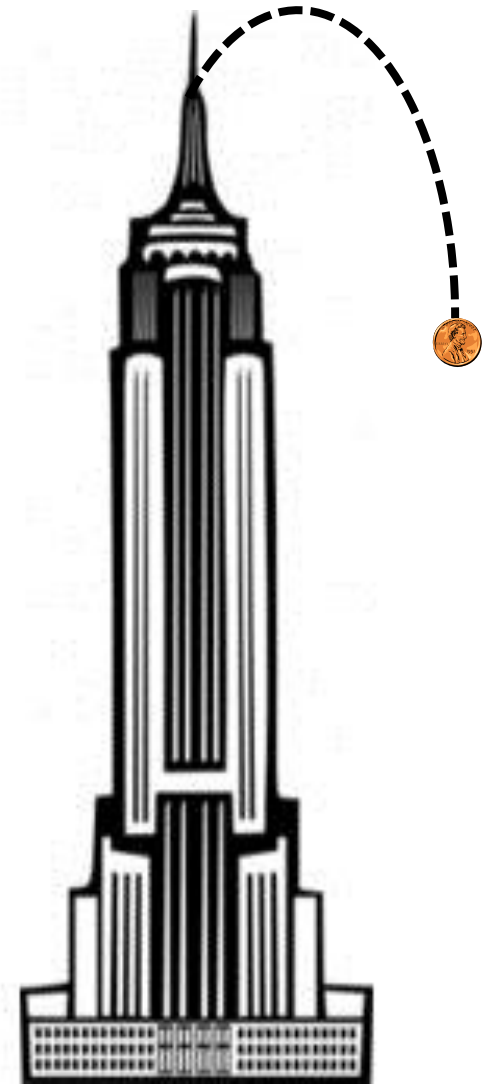
- What did they go back and look at again or what experiment did they need to adjust and redo?
- What new question did they decided to test?
- What new question do YOU have?

# VIDEO #4



## 7) CONCLUSION:

- What is the conclusion they reach for the myth?



## SUMMARY PARAGRAPH:

Write a paragraph to summarize the experiment, using the Sentence frames below. YOUR PARAGRAPH MUST INCLUDE:

**WHAT THEY DID AND WHY THEY DID IT**

**THEIR CLAIM ABOUT THE ANSWER TO THE “PROBLEM”**

**EVIDENCE TO BACK UP THEIR CLAIM**

In this experiment, the Mythbusters \_\_\_\_\_ in order to find out \_\_\_\_\_. Their results show that a penny dropped from the Empire State Building \_\_\_\_\_. For example, when the penny was fired at the head it \_\_\_\_\_ and when it was fired at their hands it \_\_\_\_\_.