

## Art Subjected to the Scientific Method!

Will it work? Everyone wants to know.  
from "The Daily DNA," UMMA, 2001

When researchers set out to perform an EXPERIMENT, they use what is called the SCIENTIFIC METHOD. This approach to solving problems consists of several steps. First the scientist makes an OBSERVATION. She then poses a QUESTION that leads to a HYPOTHESIS (an educated guess). Based on the hypothesis, she might make a PREDICTION. To figure out if the hypothesis and prediction are accurate, she will then carry out the EXPERIMENT. After performing the experiment, she will look at the results to make an ANALYSIS that will lead to a CONCLUSION.

For example a famous geneticist (a scientist who studies genes), named Seymour Benzer OBSERVED that he usually woke up at noon while other people woke up around sunrise. He QUESTIONED why that would be and HYPOTHESIZED that most people had a gene that controlled their internal clock but that he had a mutant (unusual) gene that didn't work like other people's. In his own research he studied fruit flies and discovered that some flies had completely unpredictable schedules: they were clock mutants. His EXPERIMENT involved comparing the DNA from "sunrise clock" and "mutant clock" flies. His ANALYSIS showed that they had different genes and he CONCLUDED that the genes caused different behavior. Other scientists can verify his conclusions by repeating his work.

### Lab Report

Today I visited UMMA and got to look at (OBSERVE) art made of different materials such as bronze, oil paint, watercolor, stone.

I looked at the piece called \_\_\_\_\_ and decided that these words described the material it is made of:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

Then I asked (QUESTION) what it would feel like. I PREDICTED that these words would describe how it would feel:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

The hands-on EXPERIMENT included touching some things made out of the same materials.

When I was done I CONCLUDED that this art could be described with these words:

1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_

I was surprised to find that \_\_\_\_\_