

## **Title:** Chicken Mummies- Heat/Sun Process

**Problem:** How does the process of mummification used by the South Americans work?

**Hypothesis:** If the steps used by the South American people to mummify their dead are recreated and used on a chicken, then the results will be the same.

### **Materials Needed:**

- One Cornish hen for your group
- Rubber surgical gloves for everyone in the group
- Wood Coffee Stirrer (stint)
- Cotton gauze
- Modeling clay (enough to cover a chicken)
- Paper Towels
- Electronic Scale
- Aluminum foil
- Heat Lamp
- Leather cloth strips
- One data sheet

### **Procedure:**

1. At a sink, thoroughly rinse both inside and outside of chicken. Do this until the liquid runs clear. Make your initial observations on the data sheet.
2. Using paper towels (many will be needed,) dry the chicken thoroughly inside and out, especially under the legs and wings. This is critical, since any moisture can create problems with the mummification process.
3. Weigh your chicken with the scale provided.
4. Stuff the cavity of the chicken with cotton gauze.
5. Dry off the chicken once more, and begin to cover the chicken in a thin layer of modeling clay.
6. Once you have finished covering the chicken in clay, weigh it on the scale. Record this weight on your data sheet.
7. Wrap the chicken in aluminum foil tightly and place on a cookie sheet in case the chicken begins to leak. (As the process occurs, liquid will drain from the

carcass.) Then, set the chicken under a heat lamp. Leave the heat lamp on the chicken during the day for 8-10 hours. At night store in a sealed container (plastic bin) in a cool dry place.

8. Once a week for 4 or 5 weeks, open the tinfoil and remove the chicken (be sure to wear gloves!) Dry off as needed. Weigh the chicken each time and record the weight and your observations. Replace any area of clay that needs to be replaced and reweigh before rewrapping it with aluminum foil.

9. Repeat this process each week.

10. When the chicken is done, remove it from the tin foil and the clay. Weigh it one last time. Then wrap it in leather strips or ripped muslin strips.

11. Put in a ceramic pot and use a saucer to cover the top.

12. Place in an airtight container and observe it later in the year.

### **Conclusion:**

1.) Was your hypothesis correct?

2.) What happened in your experiment?

3.) What did you learn?

4.) Complete the Venn diagram comparing the original mummy to the mummy you created.

Type of Mummy: \_\_\_\_\_

Date \_\_\_\_\_

Initial Observations	
Look	
Smell	
Feel	
Weight before clay(g)	
Weight after clay (g)	

Date \_\_\_\_\_

Weekly Observations	
Look	
Smell	
Feel	
Weight before repair (g)	
Does Clay need repairing?	
Weight after clay repair (g)	

Date \_\_\_\_\_

Weekly Observations	
Look	
Smell	
Feel	
<b> </b>	
Weight before repair (g)	
Does Clay need repairing?	
Weight after clay repair (g)	

Date \_\_\_\_\_

Weekly Observations	
Look	
Smell	
Feel	
<b> </b>	
Weight before repair (g)	
Does Clay need repairing?	
Weight after clay repair (g)	

Date \_\_\_\_\_

Weekly Observations	
Look	
Smell	
Feel	
<b> </b>	
Weight before repair (g)	
Does Clay need repairing?	
Weight after clay repair (g)	

Date \_\_\_\_\_

Weekly Observations	
Look	
Smell	
Feel	
<b> </b>	
Weight before repair (g)	
Does Clay need repairing?	
Weight after clay repair (g)	