Embryology
General Instructions

1. Location of Incubator
   - Ideal room conditions are 70-75 degrees Fahrenheit.
   - Place the incubator away from drafts, out of direct sunlight and on a inside wall if possible.
   - Be sure to make the custodians aware that the incubator must stay plugged in at all times.

2. Start and Regulate the Incubator
   - Assemble the incubator and plug it in at least one hour prior to the eggs arriving.
   - Maintain the temperature at 100 degrees, (provided incubators should be adjusted when received, however, it is good to check this). Thermometer is to be in a horizontal position. Do not try to turn the thermostat. This will cause it to break off.
   - Be very careful that nothing comes in contact with the temperature knob. Turning the knob a "hair" will result in about a 6 degree change.
   - Keep in incubator water bottle filled at all times. When adding water, use warm water.

3. Setting the Eggs
   - Place the eggs in the incubator. Eggs may have cooled a bit and will take a few hours to warm back up. Do not adjust the temperature on the incubator.

4. Incubating the eggs
   - The eggs are arriving 18-19 days into incubation. They do not need to be turned at this point.
   - Limit the number of times you open the incubator. Opening the incubator will decrease the humidity and make it more difficult for chicks to peck through. Keep a close eye on the thermometer.

5. Setting up the Brooder
   - Set up the brooder on the first day, so that it is ready for the chicks. This is where the hatched chicks will live until they are picked up.
   - Use the plastic container provided and place wood chips in the bottom, about 1" deep.
   - Fill the watering container (white jar and red watering lid screws on, then turn it over and red lid will fill with water) with water and fill the feed dish full with feed provided.
   - Clamp the heat lamp to the plastic container or a table edge and direct the light to one end of the box. This will allow chicks to regulate their own body temperature. If you notice the chicks huddled in a pile under the light they are cold and may need to be moved to a warmer location. If chicks are all in the opposite end of the brooder, as far from the heat source as possible, they are too hot. Typically the brooder should be around 95-98 degrees Fahrenheit.

6. When Chicks Hatch
   - Chicks will begin pipping (pecking through the shell) around the 21st day of incubation.
   - Pipping may take place for one to six hours; do not assist the chicks by pulling at the shell.
   - After emerging from the shell, the chicks will dry, become strong and begin to move about. This may take four to six hours. <u>It is very important to leave the chicks in the incubator until they are completely dry.</u> If it is the end of the day when the chick emerges, leave them in the incubator until morning.
   - After the hatched chicks are dry, place them in the brooder.

7. Pick up Procedures
   - Please condense all hatched chicks to one brooder with fresh, clean bedding. Take out the water and feed containers.
   - Return all non-hatched eggs to the egg carton(s).
   - Wash the incubators (blue tray and screen) in bleach water if available. If not available just use warm water. Use a damp rag to wipe out the dome lids. Do not submerge the dome lids in water.
   - Empty all the water containers and feed containers and clean..
   - <u>Please have all items to be picked up in the office by 10am.</u>
   - The manuals may be kept. Be sure to put them in a safe place for the next year!

8. Contact Information
   - Questions will arise during this project. Please feel free to contact the following people at **at any time**:
     - Kristin Cook or Doug Crouse, Extension Educators
       - Kent Extension Office 730-4000
       - Kristin's Cell Number 242-8895 (use this number after office hours or if not in the office)

PLEASE HAVE CHILDREN WASH THEIR HANDS FREQUENTLY, ESPECIALLY AFTER HANDLING CHICKS OR EQUIPMENT.

Thank you for taking the time, and making the effort, to enrich your curriculum with this great opportunity. Your students are so fortunate to have caring teachers like yourself!