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# Embryology Tips! Steps to having a Successful Hatch

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### Get Ready

- 1. One week before eggs arrive clean and test your incubator. Use a 25% bleach solution and a damp rag to clean the incubator. Do not use harsh cleansing products that contain ammonia to clean the incubator.
- 2. Two days before your eggs arrive, set up your incubator. Locate it in a place that is...
  - at least 6 inches away from the edge of a surface to prevent being knocked over,
  - out of direct sunlight or drafts,
  - will be heated to at least 65°F at all times,
  - on a sturdy level surface, and
  - plugged in to an electrical outlet that is always "on".
- 3. Make sure your incubator is set to the correct temperature. Forced air incubators should maintain a temperature of 99.5 100.5° F and still air incubators should hold a temperature of 100.5 101.5°F. The incubator should also have at least 60% humidity.
- 4. Leave the incubator on in preparation for the eggs.
- 5. Decide who will care for the eggs on the weekends during this project.

#### Get Set

- Remember to wash your hands <u>before</u> and <u>after</u> touching the eggs.
- 2. After you get your eggs, candle them to make sure there are no cracked shells or double yolks.
- 3. Mark eggs with <u>a number</u> on the large end of the egg using a <u>pencil</u> or <u>wax crayon</u>. This is done to...
  - Track individual egg progress
- 4. Mark the sides of the egg with an "X" and an "0" using a pencil or wax crayon. This is done to...
  - Remember if you've turned the egg during the day.
- 5. Let eggs come to <u>room temperature</u> for two hours before putting them in the incubator.
  - If you can't put your eggs in the incubator on the day you pick them up, store them between 50-60° F—don't put them in the refrigerator!
  - If you put the eggs in the incubator in the late afternoon, your Day One begins the following morning.
- 6. Put eggs in the incubator with the "0" end down and the "X" end up.
- 7. Do not adjust the temperature during the first 48 hours. The eggs will begin to give off heat as they develop.



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## Get Incubating

- 1. Wash your hands before and after handling the eggs.
- 2. Record the room and incubator temperature in the morning and evening.
- 3. Remember to turn the eggs (gently) 3 times per day and initial the record sheet
  - Note: On weekends it is OK to turn the eggs only once per day.
- 4. Mist the eggs or add warm water to the water dish to keep humidity levels within range each day.
- 5. Record the humidity each day.
- 6. On days 7, 14, and 18 candle the eggs to view the development of the embryo.
- 7. On day 18 stop turning the eggs.
- 8. On day 18 until the hatch, keep the humidity between 65-70%.
- 9. On day 20 cover the water dish with cheesecloth or a very thin rag to prevent shell and down from falling in to the water during the hatch.
- 10. On day 20 prepare the brooder for the chicks.
  - Add paper towels or shavings to the bottom to protect the chicks' weak legs
  - Add a jar lid, small dish, or small tuna can with marbles for water
  - Prepare a dish for food
  - Locate a heat source (lamp, light bulb, or other source)
  - Add a thermometer—brooder temp should be around 95°F.

## Get Pipping

- 1. Chicks should start to "Pip" out on day 21. You may begin to hear the chicks peep on day 20.
- 2. When chicks start to hatch, <u>remove the back plug</u> on your incubator to help with the excessive humidity.
- 3. Do not "help" chicks hatch out of their eggs.
- 4. Chicks should stay in the incubator until their <u>fluff is dry</u> (usually 2-6 hours).
  - If a chick hatches overnight it is <u>OK</u> to keep it in the incubator for a maximum of 6-12 hours.
- 5. Move chicks to the brooder in groups of 2 and 3.
- 6. Feed chicks with a chick starter that is at least 18-22% protein.
- 7. Keep water available in the brooder box.
- 8. Clean the brooder box daily.

