The Egg Game

Start with 24 eggs

Dropped 1 egg

Lose 1 egg

Didn't turn eggs - lose 1 egg

Add water

Turn eggs

105°F - lose 1 egg

Temperature

Dropped 3 eggs

Candled - 1 clear - lost 1 egg

No humidity - lose 2 eggs

Candle eggs - remove 3 duds

Eggs not turned - lose 3 eggs

Roll eggs from X to O

Roll eggs

Lose 1 egg

Put crioline on wire rack

Add water

Lose 1 egg

Check temperature

Day 21 - Hatch Day

Move chicks to brooder box

WINNER!

QUESTIONS TO ANSWER
1. What happens if you do not turn the eggs?
2. What does a clear egg mean?
3. What is the correct temperature for the incubator?
4. How many times a day should the eggs be turned?
5. How do you turn the eggs?
6. How do you keep humidity in the incubator?
7. Should eggs be rotated in the incubator?
8. What is candling?
9. When should you stop turning the eggs?

Heads moves 2 spaces.
Tails moves 1 space.

This worksheet is a part of the Incubation and Embryology Project (http://www.urbanext.uiuc.edu/eggs), University of Illinois Extension, 1999.
Egg Parts

Color each part of the egg a different color and label each part of the egg.

Use each word only once:

- air cell
- germinal disc
- vitelline membrane
- albumen or white membranes
- yolk
- chalaza
- shell

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Parts of a Chicken

Color and label the parts of a chicken.

Use each word only once:

beak  breast  comb  ear lobe
eye   hock   shanks  shoulder
toes  vent   wattles
Use each word only once:

- beak
- breast
- comb
- ear lobe
- eye
- hock
- shanks
- shoulder
- toes
- vent
- wattles
Which Egg Is Fertile?

When fertile eggs are incubated by either a hen or in an incubator, they grow. What is needed to make an egg fertile?

Look at the picture below and mark the fertile egg.

How do you know that the egg you have marked is fertile? Explain.
Which Egg Is Fertile?

When fertile eggs are incubated by either a hen or in an incubator, they grow. What is needed to make an egg fertile?

Look at the picture below and mark the fertile egg.

How do you know that the egg you have marked is fertile? Explain.

The egg on the left. The germinal disc is larger in the fertile egg as compared to the infertile egg. Cell division has occurred in the fertile egg. The fertile egg has an enlarged circle or donut. The germinal disc is small in the infertile egg.
Egg Sizing

Match the egg to its size.

- 21 oz: Pee Wee
- 15 oz: Medium
- 24 oz: Small
- 27 oz: Large
- 18 oz: Extra Large
- 30 oz: Jumbo
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Egg Grading

Match the egg to its grade.

Eggs are graded for quality. Read the description of each grade of egg carefully and then grade each egg in the box with AA, A, or B.

A grade AA egg stands up tall. The yolk is firm and the area covered by white is small.

A grade A egg has a yolk that is round and tall. The white is a little flatter than a grade AA egg.

A grade B egg spreads out more. The yolk is flattened.

The grade of eggs can change if eggs are not stored correctly or if eggs are kept for a long time in the refrigerator.

Grade ___

Grade ___

Grade ___
Egg Grading

Match the egg to its grade.

Eggs are graded for quality. Read the description of each grade of egg carefully and then grade each egg in the box with AA, A, or B.

A grade AA egg stands up tall. The yolk is firm and the area covered by white is small.

A grade A egg has a yolk that is round and tall. The white is a little flatter than a grade AA egg.

A grade B egg spreads out more. The yolk is flattened.

The grade of eggs can change if eggs are not stored correctly or if eggs are kept for a long time in the refrigerator.

Grade ___

Grade ___

Grade ___

Grade A

Grade B

Grade AA
What Kind of Heat?

What kind of heat is keeping the eggs warm in the “incubators?”

1.

2.
What Kind of Heat?

What kind of heat is keeping the eggs warm in the “incubators?”

1. Natural heat - heat from the setting hen

2. Artificial heat - heat from the heat coil in the incubator
The Thermometer

An instrument that measures temperature is a __________________.

We tried to keep the temperature at _______. The temperature would __________ when the incubator was opened.

Color the mercury red.
An instrument that measures temperature is a **thermometer**.

We tried to keep the temperature at **100.5°F**. The temperature would **drop** when the incubator was opened.

Color the mercury red.
**Temperature Comparison Chart**

Use your red crayon, marker or pencil to show the normal temperature of a healthy hen or student, the temperature in your classroom, and the correct temperature for the incubator.

- Who or what has the **highest** temperature?
- Who or what has the **lowest** temperature?
Use your red crayon, marker or pencil to show the normal temperature of a healthy hen or student, the temperature in your classroom, and the correct temperature for the incubator.

- Who or what has the highest temperature? **Hen**
- Who or what has the lowest temperature? **Room**
# Needs Comparison Chart

<table>
<thead>
<tr>
<th>Needs</th>
<th>Baby</th>
<th>Chick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td></td>
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<tr>
<td>Warmth</td>
<td></td>
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</tr>
<tr>
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<td></td>
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</tr>
<tr>
<td>Safety and Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Who provides for the needs that you have checked for the baby? Who provides the needs for the chick? Why are the needs important? How can you provide for the needs of either a baby or a chick?
# Needs Comparison Chart

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<th>Chick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
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<td>X</td>
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<td>X</td>
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</tbody>
</table>

Babies and chicks have the same needs. The parent or care giver is responsible for the baby’s care. The mother hen or the chick caregiver is responsible for the chick’s care.
Unscramble the Scrambled Eggs

1. geg
2. hne
3. koyl
4. htcah
5. lehls
6. oymrbe
7. aekb
8. iecckhn
9. orcuibtna
10. ingsw
11. tapemertrue
12. izdeltirfe

1. ________________ 7. ________________
2. ________________ 8. ________________
3. ________________ 9. ________________
4. ________________ 10. ________________
5. ________________ 11. ________________
6. ________________ 12. ________________
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KEY

1. egg
2. hen
3. yolk
4. hatch
5. shell
6. embryo
7. beak
8. chicken
9. incubator
10. wings
11. temperature
12. fertilized
Circle the hidden words on the list. The words can be hidden up, down or diagonally. When you have finished, use the left over letters to find a message. What is the message?

The message is

Words to find

- egg
- embryo
- membrane
- incubator
- hatch
- feather
- shell
- yolk
- egg tooth
- hen
- beak
- combs
Circle the hidden words on the list. The words can be hidden up, down or diagonally. When you have finished, use the left over letters to find a message. What is the message?

The message is **THE EGG IS PIPED HEAR THE CHICKS PEEP**

Words to find

- egg
- hatch
- egg tooth
- embryo
- feather
- hen
- membrane
- shell
- beak
- incubator
- yolk
- combs
Science Vocabulary

Put these words in alphabetical order.

hatch  chicken  temperature
peeps  egg tooth  membrane
heart  rooster  blood vessels
egg  hen  incubator
beak  chick  fertilized
yolk  embryo  development
white  sac  thermometer
shell  wings  feathers

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________
5. ____________________________
6. ____________________________
7. ____________________________
8. ____________________________
9. ____________________________
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14. ____________________________
15. ____________________________
16. ____________________________
17. ____________________________
18. ____________________________
19. ____________________________
20. ____________________________
21. ____________________________
22. ____________________________
23. ____________________________
24. ____________________________

Choose 12 vocabulary words. Use each word in a complete sentence.

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Put these words in alphabetical order.

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white    sac        thermometer
shell    wings      feathers

1. beak
2. blood vessels
3. chick
4. chicken
5. development
6. egg
7. egg tooth
8. embryo
9. feathers
10. fertilized
11. hatch
12. heart
13. hen
14. incubator
15. membrane
16. peeps
17. rooster
18. sac
19. shell
20. temperature
21. thermometer
22. white
23. wings
24. yolk

Choose 12 vocabulary words. Use each word in a complete sentence.
Crossword Puzzle

a. (across) What heats the incubator? (two words)
b. (down) What controls the light bulb and the heat in the incubator?
c. (down) What do you use to incubate eggs?
d. (across) What do you call an unborn chick?
e. (across) What does a thermometer measure?
f. (across) What job must be done with the eggs three or more times a day?
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b. (down) What controls the light bulb and the heat in the incubator?
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