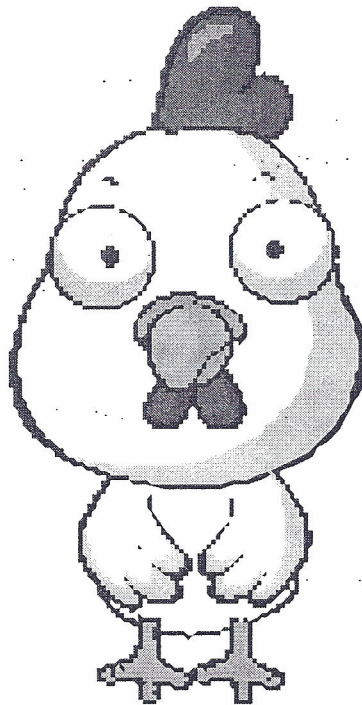


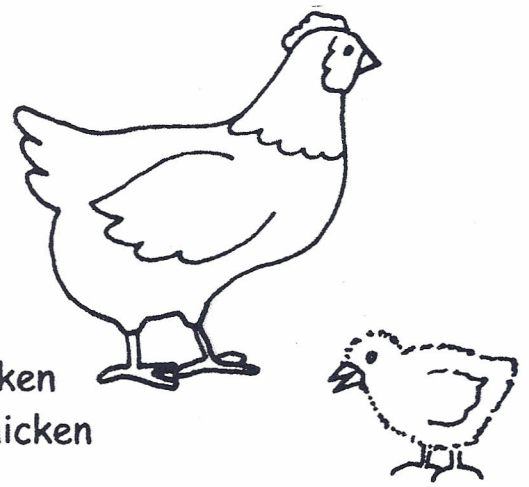
Ag in the Classroom

Alabama Ag in the Classroom



Poultry Unit

Chickens: The Life Cycle



Objectives: Students will

- Be able to identify the parts of a chicken
- Become aware of the life cycle of a chicken

Materials Needed:

- Life Cycle of A Chicken by David M. Schwartz
- Chart of Life Cycle of a chicken
- Worksheets
- Baby bird story worksheet

Keywords:

- Lay house, cheeping, grains, egg tooth, broiler, comb, layer, embryo, albumen, feathers, brooding, egg, yolk, yolk sac, milo

Brief Description:

A chicken is a bird. Birds have feathers and two wings. They start life inside an egg from which hatches a chick. Chickens provide food for humans in two forms - meat and eggs. Chickens are a very efficient way to convert feed (grain) into food for people. In Alabama the principal product from poultry is the meat. In Alabama we do have layer houses from which we get our eggs. During her productive years, a hen will lay one egg a day for about 40 weeks. They are then given a rest for about three weeks, and then resume laying eggs for about 21 additional weeks. Before the 1940's most people had small flocks of hens in their backyards for eggs and meat. Since that time egg farmers have raised hens in lay houses. These homes are temperature, humidity, and light controlled. In broiler houses and lay houses automatic feeders move through the houses with clean water always close for them to drink.

Chickens are fed a balanced diet of corn, wheat or milo grains and soybean meals. Vitamins and minerals are added to their food. Most chickens eat a better-balanced meal than some humans. The goal of a poultry farmer is to raise a healthier chicken. Egg farmers know they have to put their hens first.

Lesson:

1. Egg to Chicken: Read and discuss the story Life Cycle of a Chicken by David M. Schwartz. Discuss the life cycle of the chicken. Pass out the life cycle of a chicken worksheet and complete together discussing various stages.
2. Hand out the worksheet for students to label the different parts of a chicken; they can also color the chicken.
3. Use additional worksheets as follow-up.
4. Have students complete the baby bird story worksheet.

Vocabulary:

Albumen - the white part of the egg which surrounds the growing chick

Brooding - when a hen looks after her eggs by keeping them warm

Cheeping - the noise that chicks make so that their mother know where they are

Comb - the bright red crest on top of a chicken's head

Egg - contains the baby bird

Egg tooth - a tiny tooth-like point on the tip of the beak of a newborn chick, the chick uses the egg tooth to break through the eggshell

Embryo - the early stage of a young animal before it can move and before it resembles its parents

Feathers - the soft, light and often colorful covering of birds

Membrane - a very thin inside covering of the egg shell

Nest - a hollow place built or used as a home to rear its young

Shell- the hard covering of an egg which protects the growing chick

Yolk- the yellow part of an egg which is used as food by the growing chick

Yolk Sac - a sack that protects the yolk

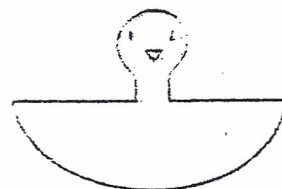
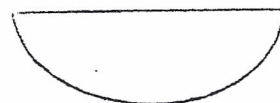
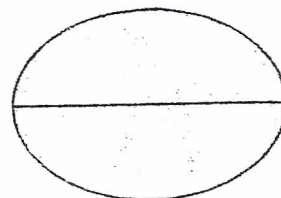
BABY BIRD STORY

A-Fold-And Cut Story

(Have ready in your lap orange 9x12 construction paper, scissors, and a black felt pen.)

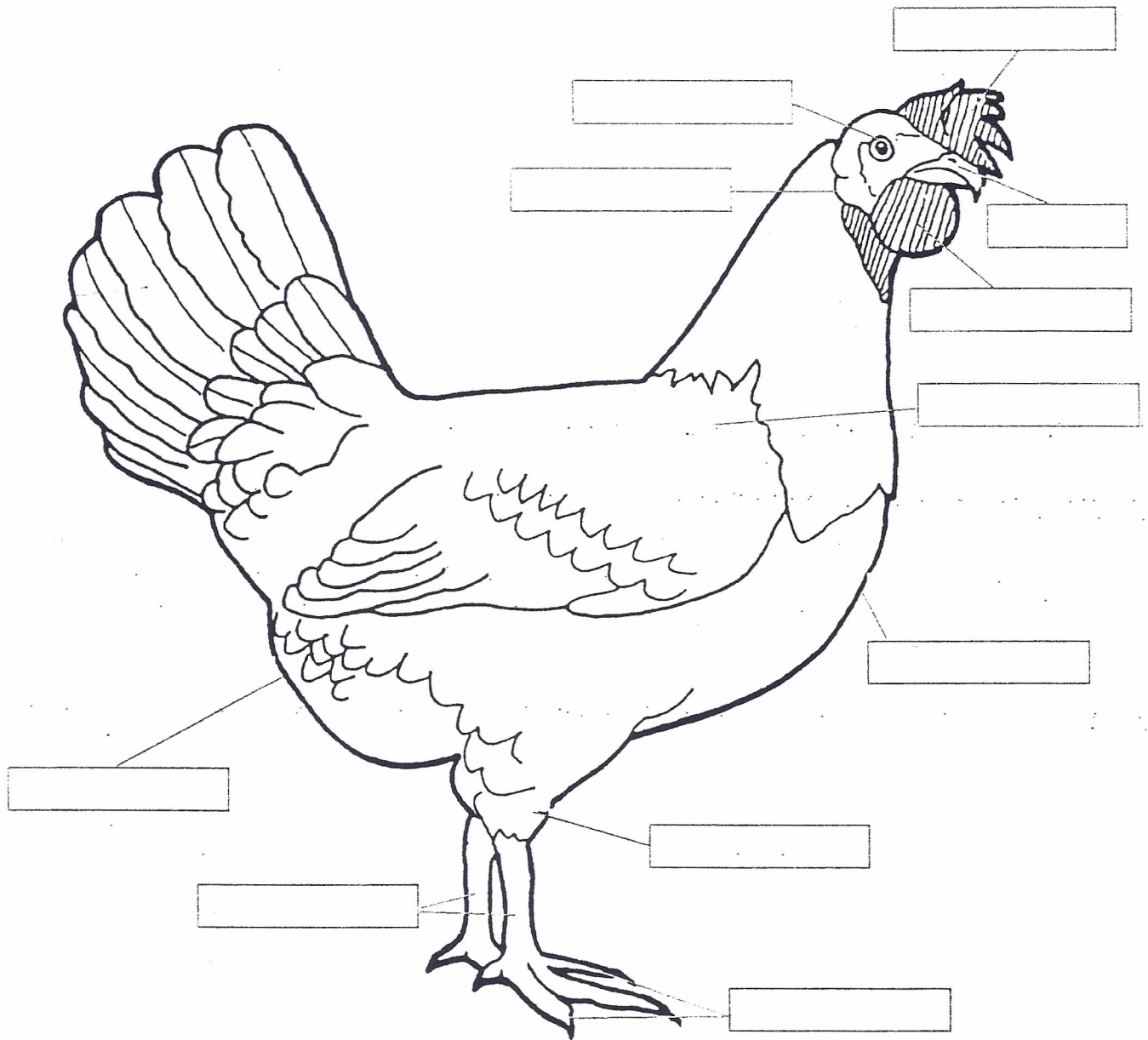
One spring day a mother bird and a father bird began to build a nest. It took them a long time because they had to carry many pieces of string and grass twigs high up into the branch of a tree. When they finally finished, it looked like this: (Fold paper in half lengthwise and cut as shown on dotted line.) Then the mother bird sat down on the nest and laid a beautiful egg, and the egg was shaped like this: (Unfold nest and show egg shape.) The egg was far down into the nest where no one could see it. (Fold back into nest shape again.)

Now the mother bird had to sit on the egg to keep it warm. She had to sit there for an awfully long time...on hot days, rainy days, and cold days. So she was very glad when the two little black bug came along to keep her company. They had nice long talks, and that made the day more pleasant for her. (Make two black dots, one on each side of the nest, near the top, one-third of the way from the end.) At last the time came for the egg to hatch, and the mother bird heard a crackling noise. She looked down to see that there were some cracks in the egg. The cracks got bigger and bigger. (Cut as indicated by dotted lines.) Finally, the egg broke in half, and out come...guess what? A baby bird! (Fold top part of egg down, and fold bill up slightly.)



Parts of a Chicken

Color and label the parts of a chicken.



Use each word only once:

beak
eye
toes

breast
hock
vent

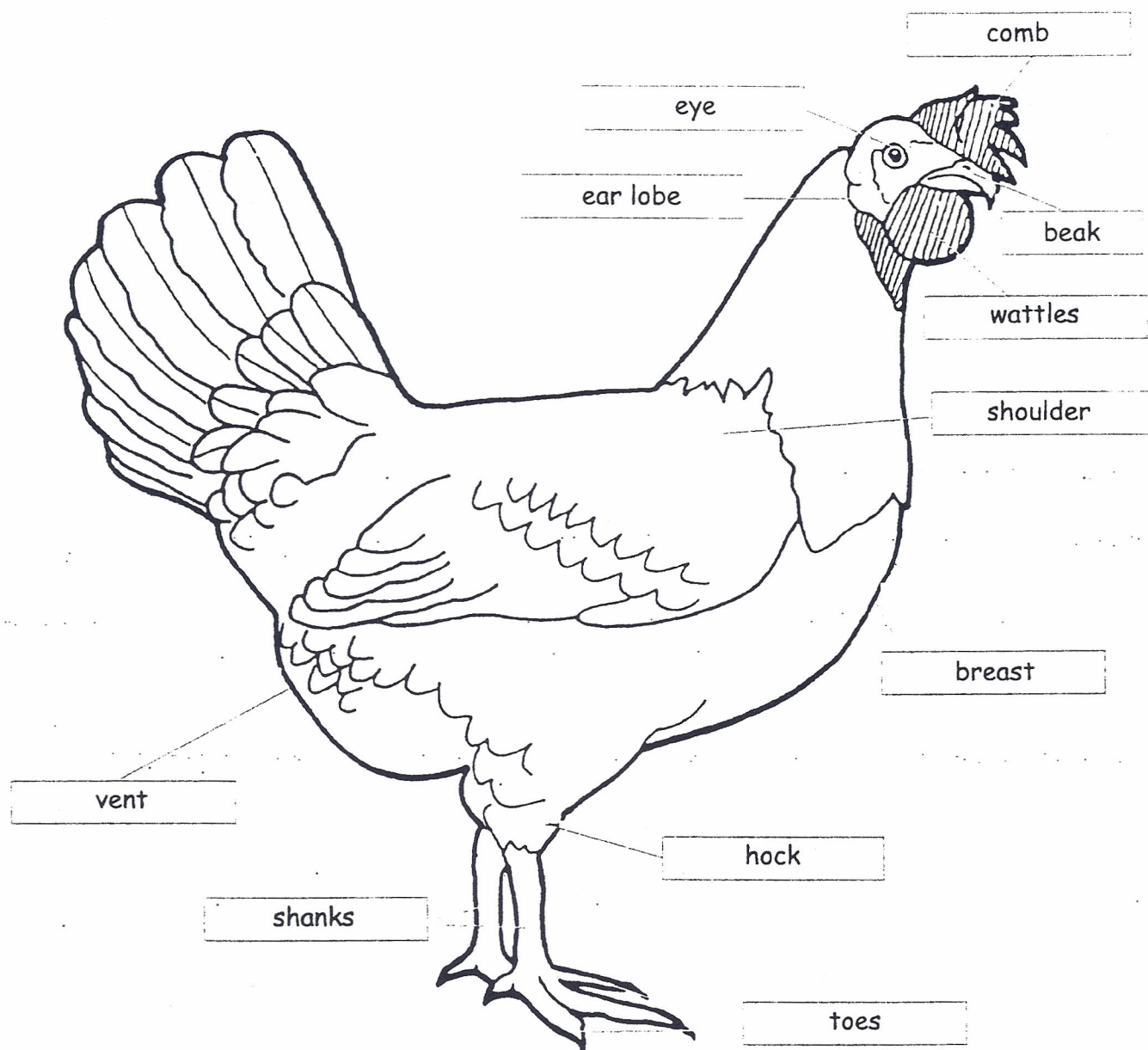
comb
shanks
wattles

ear lobe
shoulder

KEY

Parts of a Chicken

Color and label the parts of a chicken.



Use each word only once:

beak
eye
toes

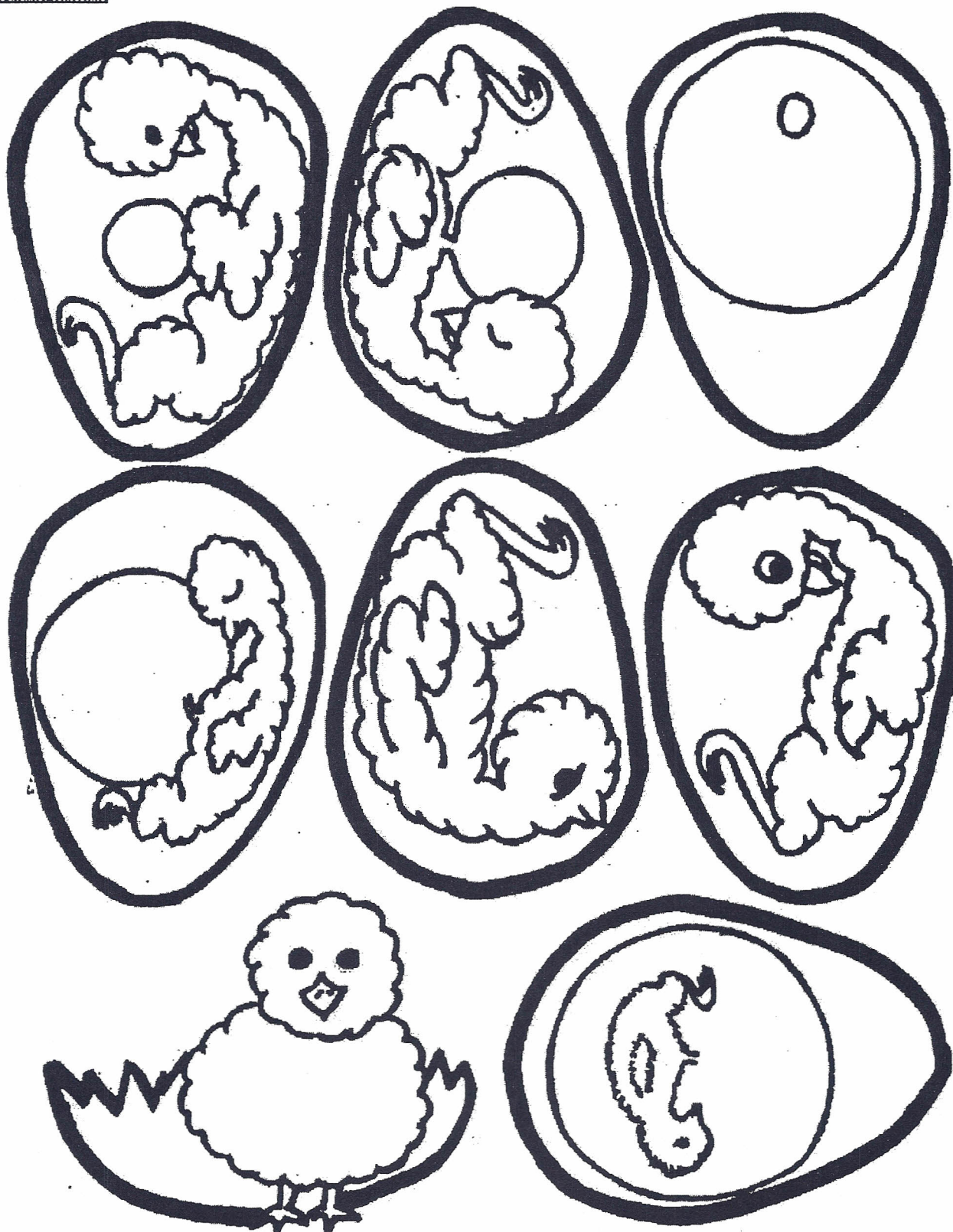
breast
hock
vent

comb
shanks
wattles

ear lobe
shoulder

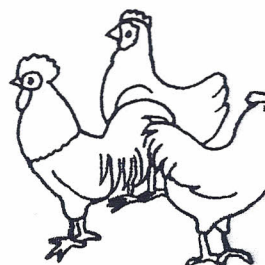
CHICK DEVELOPMENT

Chick Development - Have the students cut out and sequence the development of the chick inside the egg. This process takes 21 days.



Did You Know? Facts about Chickens and Eggs!

- In Gainesville, Georgia, the chicken capital of the world, it is illegal to eat chicken with a fork.
- Alektorophobia is the fear of chickens.
- Wild Red Jungle Fowl are the ancestors of today's chickens. The breed has survived at large for about 8,000 years-rare for a wild ancestor of a domesticated animal.
- The waste produces by one chicken in its lifetime can supply enough electricity to run a 100-watt bulb for five hours.
- A hen must eat about four pounds of feed to produce one dozen eggs.
- A hen will lay bigger and stronger eggs if you change the lighting in a way to make her think a day is 28 hours long.
- Over 9 billion chickens are raised for food annually in the U.S.
- Researches have found a way to turn chicken feathers into string, plastic composites for products as varied as car dashboards and boat exteriors.
- Feathers make good paper, even for filters or decorative wallpaper. They work best combined with wood pulp to increase the number of times the fiber can be recycled.



- The superfine size and shape of feathers make them well suited to filtration needs.
- Agricultural researchers have found a carbonization process that converts ordinary poultry manure into granules and powders that can mop up pollutants in water.
- The chicken can travel up to nine miles an hour.
- The "Chicken Dance" was introduced in the United States in 1981 by the Heilbronn Band from Germany during the 1981 Tulsa Oktoberfest. The song was not actually the Chicken Dance, but "Der Ententanz" - "The Duck Dance." There was not a duck costume to be found anywhere in Tulsa; however, a chicken costume was available at one of the local television stations. The station donated the costume for use at the festival, and the rest is history. At that time the tune was all the rage in Germany.
- Dance like a Chicken Day is May 15th.

Paper Plate Chick

Make a cute paper plate chick and learn fractions at the same time.

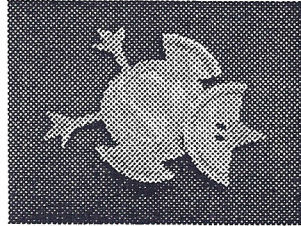
Materials:

3 yellow dessert paper plates

Black Marker

Stapler and staples

Orange construction paper



Directions:

1. Ask the students to fold two of their paper plates inside out. These will be Plate 1 and Plate 2.
2. Ask the students to place Plate 1 on the table yellow side down.
3. Have the students cut two chick feet out of orange construction paper. They can staple the feet to Plate 1.
4. Have the students take Plate 3 and cut it in half. Then they should cut one half in half again. This will make one $\frac{1}{2}$ piece and two $\frac{1}{4}$ pieces.
5. Have the students use the two $\frac{1}{4}$ pieces to make wings for the chick by stapling them to Plate 1. The yellow side of the wings should be face up.
6. Have the students place Plate 2 on top of Plate 1 and staple them together around the outsides of the plates.
7. Have the students take the $\frac{1}{2}$ piece from Plate 3 and staple it to the rest of the chick. The flat side of the $\frac{1}{2}$ piece should point out. This will be the head.
8. Have the students cut a beak out of orange construction paper by making two triangles and stapling them on top of one another on the chick's head.
9. Have the students use a black marker to draw eyes on their chick.

Out of Place

In the following group of words,
one does not belong. Circle it.



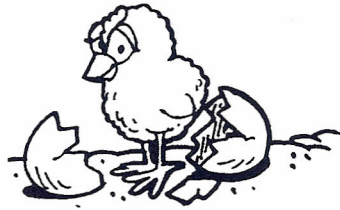
1. Chickens have:
feathers beaks eyes ears brushes combs.
2. These are names used for chickens:
hen rooster pullet cockerel chick piglet
3. These are chicken parts we buy in the grocery store:
thighs drumsticks chops wings quarters breasts
4. These are things needed to raise chickens:
feed water building bubble gum lights
5. These are ways to cook chicken:
fried baked stewed broiled spoiled creamed
6. The parts of an egg are:
shell white scales membrane yolk
7. Buildings used in marketing chickens:
hatchery broiler house processing plant garage supermarket
8. These people help in growing chickens:
feed man policeman supervisors farmer veterinarians
9. Chickens can:
eat drink scratch play ball peep
10. Chicken feed contains:
corn minerals cucumbers soybeans

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Word Search



Find the hidden words in the letters grouped below. Circle them.

Brooder

Corn

Fowl

Incubator

Broiler

Farmer

Fryer

Poultry

Chicks

Feather

Hen

Pullet

Chickens

Feed

Layer

Rooster

Flock

P S N F O I N C U B A T O R E
 R O L O T R S D E F N S B C M
 N B U W S N T J L C H I C K S
 F G T L A Y E R H O D B R T V
 B F P R T L B U N R G H B A D
 G L E B S R P G L N I F E E D
 C O I N F R Y E R T A E A H O
 H C J C B I F L O C K A T A U
 I K L M A E B F A J O T E T B
 C O U P L E W A F A O H R C L
 K B E U H X B R O I L E R H E
 E C F L D R Z M W C D R E E P
 N G M L U K L E L T V S M R E
 A N H E N M B R O O D E R Y A
 R D I T E H N N E T T E R S T
 S V T N B E A R O O S T E R S

Word Search

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Brooder

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Chickens

Feed

Layer

Rooster

Flock

P	S	N	F	O	I	N	C	U	B	A	T	O	R	E
R	O	L	O	T	R	S	D	E	F	N	S	B	C	M
N	B	U	W	S	N	T	J	L	C	H	I	C	K	S
F	G	T	L	A	Y	E	R	H	O	D	B	R	T	V
B	F	P	R	T	L	B	U	N	R	G	H	B	A	D
G	L	E	B	S	R	P	G	L	N	I	F	E	E	D
C	O	I	N	F	R	Y	E	R	T	A	E	A	H	O
H	C	J	C	B	I	F	L	O	C	K	A	T	A	U
I	K	L	M	A	E	B	F	A	J	O	T	E	T	B
C	O	U	P	L	E	W	A	F	A	O	H	R	C	L
K	B	E	U	H	X	B	R	O	I	L	E	R	H	E
E	C	F	L	D	R	Z	M	W	C	D	R	E	E	P
N	G	M	L	U	K	L	E	L	T	V	S	M	R	E
A	N	H	E	N	M	B	R	O	O	D	E	R	Y	A
R	D	I	T	E	H	N	N	E	T	T	E	R	S	T
S	V	T	N	B	E	A	R	O	O	S	T	E	R	S

Term - inology

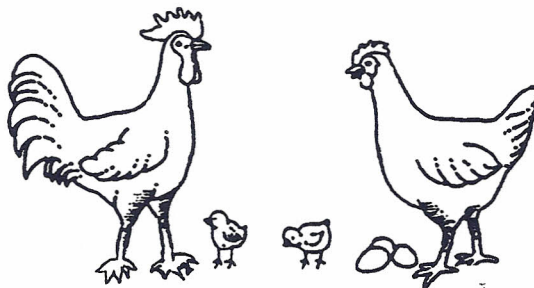
Fill in the blanks with the correct terms listed at the bottom of the page.

1. Male chickens are called _____ and _____
2. Female chickens more than one year old are called _____
3. Female chickens less than one year old are called _____
4. Baby chickens of either sex are _____
5. Male chickens which have been surgically desexed are _____
6. The chicken's head is adorned with a _____ and _____
7. Chicken feathers are called _____
8. Hens lay _____
9. The protective covering of an egg is the _____
10. Eggs are hatched in _____

comb
cockerel
eggs
chicks

hens
plumage
pullets
roosters

capons
shell
wattel
incubators



Term - inology

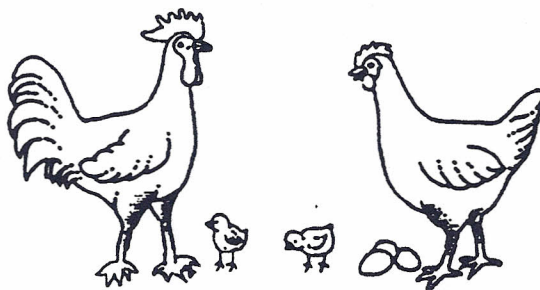
Fill in the blanks with the correct terms listed at the bottom of the page.

1. Male chickens are called roosters and cockerel
2. Female chickens more than one year old are called hen
3. Female chickens less than one year old are called pullets
4. Baby chickens of either sex are chicks
5. Male chickens which have been surgically desexed are capons
6. The chicken's head is adorned with a comb and wattel
7. Chicken feathers are called plummage
8. Hens lay eggs
9. The protective covering of an egg is the shell
10. Eggs are hatched in incubators

comb
cockerel
eggs
chicks

hens
plummage
pullets
roosters

capons
shell
wattel
incubators



A LUCKY BREAK

1

SUBJECTS: Language Arts

STUDENT SKILL: The student will identify and explain figurative language, including symbolism, imagery, metaphor, personification, simile, and idioms.

OBJECTIVE: The student will identify and decipher some common phrases in the English language that are related to poultry.

BACKGROUND

The chicken is probably the most common bird in the world. It is raised for meat, eggs and byproducts such as feathers. Some people even raise chickens as a hobby. The chickens we know today came from red jungle fowl of southeast Asia, which were first tamed around 2300 BC. Chickens were kept for their eggs, and when the birds grew too old to lay, they were used for meat.

The tradition of pulling apart the wishbone, or clavicle, may be as much as 2,500 years old. Ancient Etruscans in what is now Italy kept chickens in their temples to aid priests in interpreting signs of the future. When one of the sacred birds died, the collarbone was dried and saved. Believers would stroke the bone and then make a wish.

The ancient Romans, who came to live in Italy after the Etruscans, believed chickens had special powers. When sacred chicken bones from the temple became scarce, the people began breaking the collarbone of the chicken in half to create more bones for others.

The Romans carried the custom with them when they conquered the British Isles. The British were the first to believe good luck would come to the person left with the head of the bone still attached, or the "lucky break."

China raises more chickens than any other country in the world. The largest number of chickens grown in the US are grown on commercial broiler farms. Broilers are seven- to eight-week-old chickens raised for their heavy meat content.

The major broiler-producing states are Arkansas, Georgia, Alabama, North Carolina, Mississippi, Texas, Delaware and Maryland. Oklahoma ranks number 10 in broiler production. Poultry and eggs are the second most valuable agricultural

MATERIALS

wishbones from chicken, cleaned and dried

OKLAHOMA AG IN THE CLASSROOM



VOCABULARY

fowl
clavicle
Etruscans
broilers
roost

Oklahoma Ag in the Classroom is a program of the Oklahoma Cooperative Extension Service, 4-H Youth Development, in cooperation with the Oklahoma Department of Agriculture, Food and Forestry, and the Oklahoma State Department of Education.

Oklahoma Ag in the Classroom
Oklahoma 4-H Programs
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Oklahoma State University
Stillwater, OK 74078
405-744-8889
<http://www.agclassroom.org/ok>



product in Oklahoma, behind cattle and calves.

Most chickens weigh between seven and 10 pounds. Hens start laying at 22 weeks of age. A good layer will lay 206-280 eggs a year during her most productive period. Eggs hatch in 21 days.

ACTIVITY

1. Share background information, and ask students if they are familiar with the practice of wishing on the wishbone of a chicken.
2. If you have several wishbones available, let students try their luck at pulling them apart (One student holds each end. Each makes a wish and pulls. The one with the "head" of the bone still attached gets his or her wish.)
3. Explain that the "lucky break" is only one of many common phrases in the English language that are related to poultry. Ask students what it means to call someone a "chicken" and why. Ask students if they are familiar with any other sayings related to chickens.
4. Discuss analogy, metaphor and simile. Explain that some old sayings contain imagery that made more sense when everyone lived on the farm. The chicken-related sayings on the student worksheets are some examples.
5. Divide students into groups of four or five. Make one copy of Student Worksheets A and B for each group. Cut up the pages to make cards, as shown.
6. Have students work together to pair the phrases with the correct explanations.
7. After students have had time to put the cards together, read each phrase aloud, and have students give their answers. Discuss possible origins of each phrase, and provide students with the information on the answer sheet.
8. Have each group write a story using as many of the phrases as possible. Then have students read their stories to the class.

ADDITIONAL ACTIVITIES

1. Have students determine if each saying is an analogy, metaphor or simile.
2. Have students write their own "old sayings" based on things with which they are very familiar.
3. Boil a large broiler chicken, and retrieve the bones. Boil the bones again to remove all the fat. Dry the bones, and bury them in sand or plaster of paris. Have students dig them out carefully with spoons and guess which part of the chicken they



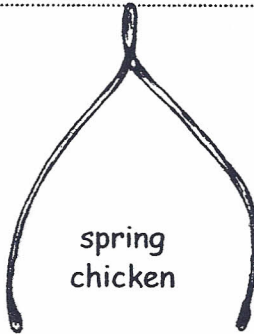

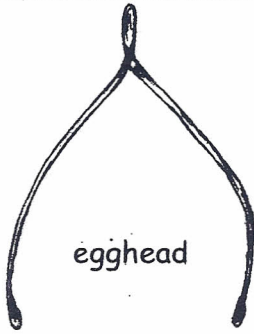



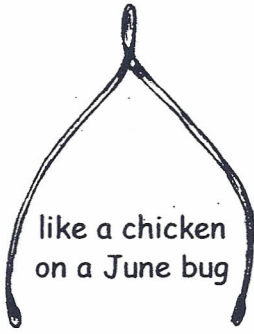
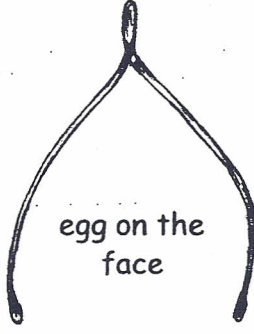
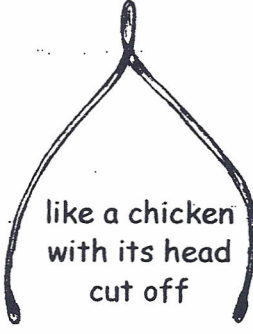
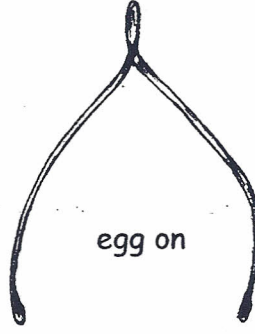


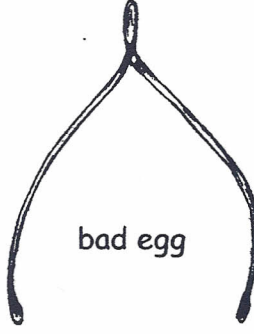

came from.

4. Bring boiled, dried chicken bones to class along with glue, wire and other materials, and have students work in groups to construct imaginary creatures. Have students write stories about their imaginary creatures.
4. Place drumsticks and wishbones in a glass jar, cover the bones with vinegar and screw the lid on the jar. After two weeks, take them out and have students observe the changes.
5. Have students research on the internet or in the library to find more information about the ancient Etruscans (See background).

Name _____

A Lucky Break

A

 <p>lucky break</p>	 <p>chickens coming home to roost</p>	 <p>spring chicken</p>	 <p>golden egg</p>
 <p>egghead</p>	 <p>pecking order</p>	 <p>Don't put all your eggs in one basket.</p>	 <p>mad as a wet hen</p>
 <p>like a chicken on a June bug</p>	 <p>egg on the face</p>	 <p>like a chicken with its head cut off</p>	 <p>egg on</p>
 <p>walking on egg shells</p>	 <p>counting your chickens before they hatch</p>	 <p>bad egg</p>	 <p>chicken feed</p>



Produced by Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources, OSU, in cooperation with the Oklahoma Department of Agriculture, Food, and Forestry and the Oklahoma State Department of Education, 2002



Name _____

A Lucky Break

B

an
intellectual

great profit

a young
woman

A person's
words or acts
come back to
cause trouble

very quickly

very angry

Don't risk all
you have on
just one thing.

The way
people are
ranked in
relation to
each other.

behaving in a
careful
manner so as
not to offend
someone

urge someone
on

in a hurried
or
disorganized
way

embarrassed

unexpected
good fortune

a small sum
of money

a person who
disappoints
expectations

depending on
getting
something
before you
actually get
it



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OSU, in cooperation with the Oklahoma Department of Agriculture, Food, and Forestry and the Oklahoma
State Department of Education, 2002



Name _____

A Lucky Break (answers)

lucky break—unexpected good fortune

From the practice of breaking the wishbone of the chicken for good luck. The English believed good luck would come to the person left with the head of the bone still attached, or the "lucky break."

chickens coming home to roost—someone's words or acts come back to cause trouble for them

Chickens which stray during the day return to their roost at night.

spring chicken—a young woman

Chicken was once a seasonal meat, produced from spring eggs, hence the term "spring chicken." Today's spring chicken may not be hatched in spring at all, but the term still applies to a young bird, from two to ten months old, with tender flesh. Likewise, chickens were formerly raised mostly for eggs and were not cooked for their meat until they were no longer able to lay eggs. Since their diets were fairly lean, their meat tended to be tough—"a tough old bird." In slang this phrase refers to a tough old woman.

golden egg—great profit

From the story of Jack and the Beanstalk.

egghead—an intellectual

At one time large foreheads were considered a sign of great intelligence. Because heads with this characteristic resembled eggs, people with great intelligence came to be called "eggheads." During the 1952 presidential campaign between Dwight D. Eisenhower and Adlai Stevenson, the Eisenhower campaign brought the word into common usage by using it to describe Stevenson and his supporters. Stevenson was considered an intellectual. He was also bald, which made the term seem even more appropriate. Although great intelligence is normally considered a good thing, in this case Stevenson's critics used it against him by claiming it meant he was out of touch with the common people.

pecking order—The way people are ranked in relation to each other.

Among animals, the stronger animal in a group always asserts dominance over the weaker ones. In a chicken yard, the most dominant chickens peck at the weaker ones without fear the weaker ones will peck back.

chicken feed—a small sum of money

In pioneer days table scraps and inferior grain were used to feed chickens.



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Name _____

A Lucky Break (Answers)

counting your chickens before they are hatched—depending on getting something before you actually get it.

One of Aesop's fables describes a market woman saying she will get so much for her eggs that with the money she will buy a goose; the goose in time will bring her so much, with which she will buy a cow, and so on; but in her excitement she kicks over her basket, and all her eggs are broken.

Don't put all your eggs in one basket.—Don't risk all you have on just one thing.
See above.

bad egg—a person who disappoints expectations
A rotten egg looks fine from the outside.

egg on—urge someone on
The origin of this phrase actually has nothing to do with chickens or eggs. It is a corruption of the Saxon word eggian, which means "to incite."

mad as a wet hen—very angry
This phrase has no basis in fact, since hens do not get particularly excited when wet. Hens are known to cluck angrily and peck when provoked, however.

like a chicken with its head cut off—in a hurried or disorganized way
Killing a chicken involves taking its head off. A decapitated chicken often continues to flutter its wings and flap about wildly for several seconds before dying. When people kept chickens in their yards for eggs and meat, this was a familiar sight.

like a chicken on a June bug—very quickly
Chickens eat all kinds of bugs and pounce on them very quickly in order to catch them before they fly away.

egg on the face—embarrassed

walking on eggshells—behaving in a careful manner so as not to offend someone
This refers to people who are easily offended, like eggshells are easily broken.



Produced by Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources, OSU, in cooperation with the Oklahoma Department of Agriculture, Food, and Forestry and the Oklahoma State Department of Education, 2002



Name _____

A Lucky Break

VOCABULARY

fowl—A bird, such as the duck, goose, turkey, or pheasant, that is used as food or hunted as game.

clavicle—A bone found in fowl, often called a wishbone.

broiler chicken—A tender young chicken suitable for broiling.

Etruscans—People who lived in ancient Etruria, in what is now Tuscany and parts of Umbria in western Italy.

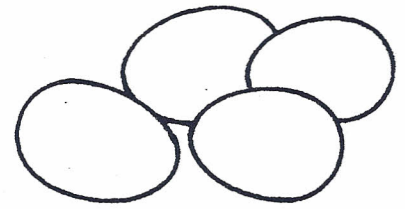
roost—A perch on which domestic fowl or other birds rest or sleep.



Produced by Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources,
OSU, in cooperation with the Oklahoma Department of Agriculture, Food, and Forestry and the Oklahoma
State Department of Education, 2002



The Incredible Edible Egg



Objectives: Students will

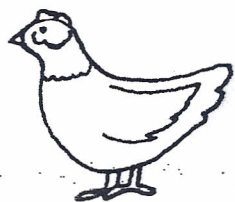
- Comprehend and respond to literary works.
- Explore the various characteristics of an egg and label the parts.
- Be able to distinguish between a raw and a cooked egg and explain the differences between a liquid and a solid.
- Count by 2's, 3's, and 5's, using pictures of eggs.

Materials Needed:

- Book: Chicks and Chickens by Gail Gibbons
- Enough cooked and raw eggs for every two students
- Enough cooked eggs for each pair of students to have one egg
- Paper egg patterns for each student to have 25 cutout eggs
- Two paper plates for each group
- Worksheets

Brief Description:

The egg is nature's perfect home for incubating a chick embryo. It is covered with a shell that protects life until ready to hatch. The air sac at one end acts as a shock absorber. The white liquid is albumen and provides water for the hatching chick. The thick cord on each end of yolk is the chalazae and holds the yolk in place. The yolk is the chick's food supply for the embryo which may develop from the white spot on the yolk if it is fertilized. The egg's white and yolk provide protein and cholesterol. Eggs are inexpensive and are used in many different ways for cooking. Most of the eggs we eat come from female chickens called layers. When you eat an egg you are eating a single cell. People who raise hens place a nest in the hen house for the chickens to lay their eggs. If a chicken does not have a nest, they will build one. The

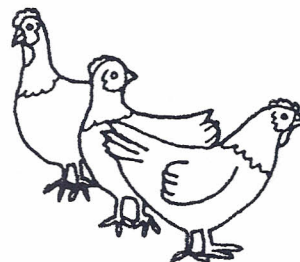


egg is the symbol of birth, growth, springtime renewal, plentiful harvests, good luck, and hope. Eggs represent the beginning of life.

Lesson:

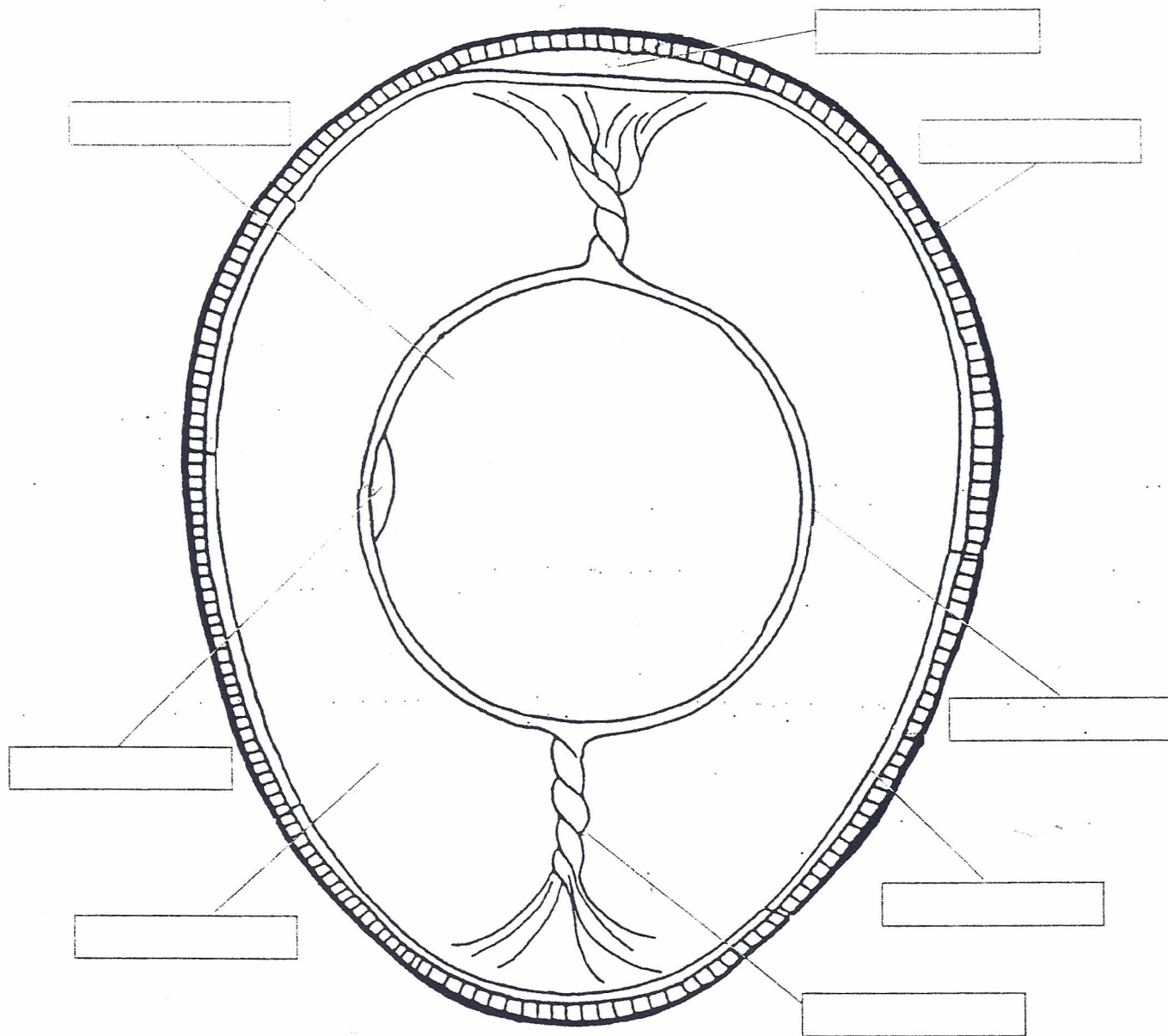
1. Inside the Egg: Read and discuss the story Chicks and Chickens by Gail Gibbons. Pass out one hard boiled egg to each pair of students. Have the students examine the egg and discuss how it feels and looks. Generate as much vocabulary as possible. Peel the egg and identify the parts. Using the worksheet, label the parts correctly. For Kindergarten and first grade cut and paste the answers.
2. The Spinning Egg Trick: Give each pair of students, one raw and one cooked egg and two paper plates. Each student holds an egg on a plate. When told to start, each child spins its egg. Judging from the way the egg spins predict which is the raw egg and which is the cooked egg. Discuss why. Record predictions on an egg shaped chart-marked raw/cooked. The hard-boiled egg spins faster and longer because it is solid. The liquid in the raw egg creates drag between the inside of the shell and the liquid. The drag slows down the raw egg and eventually causes the egg to stop.
3. Count By's: Summarize the background information about chickens. Handout the paper eggs to students. Have them cut out ahead of time. Practice building sets of 2's, 3's, and 5's. Then discuss the different ways of counting. Hand out and discuss the worksheets for the students to complete independently. Use the egg shapes for any extra skills needed.

Thanks to Montana Ag in the Classroom



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

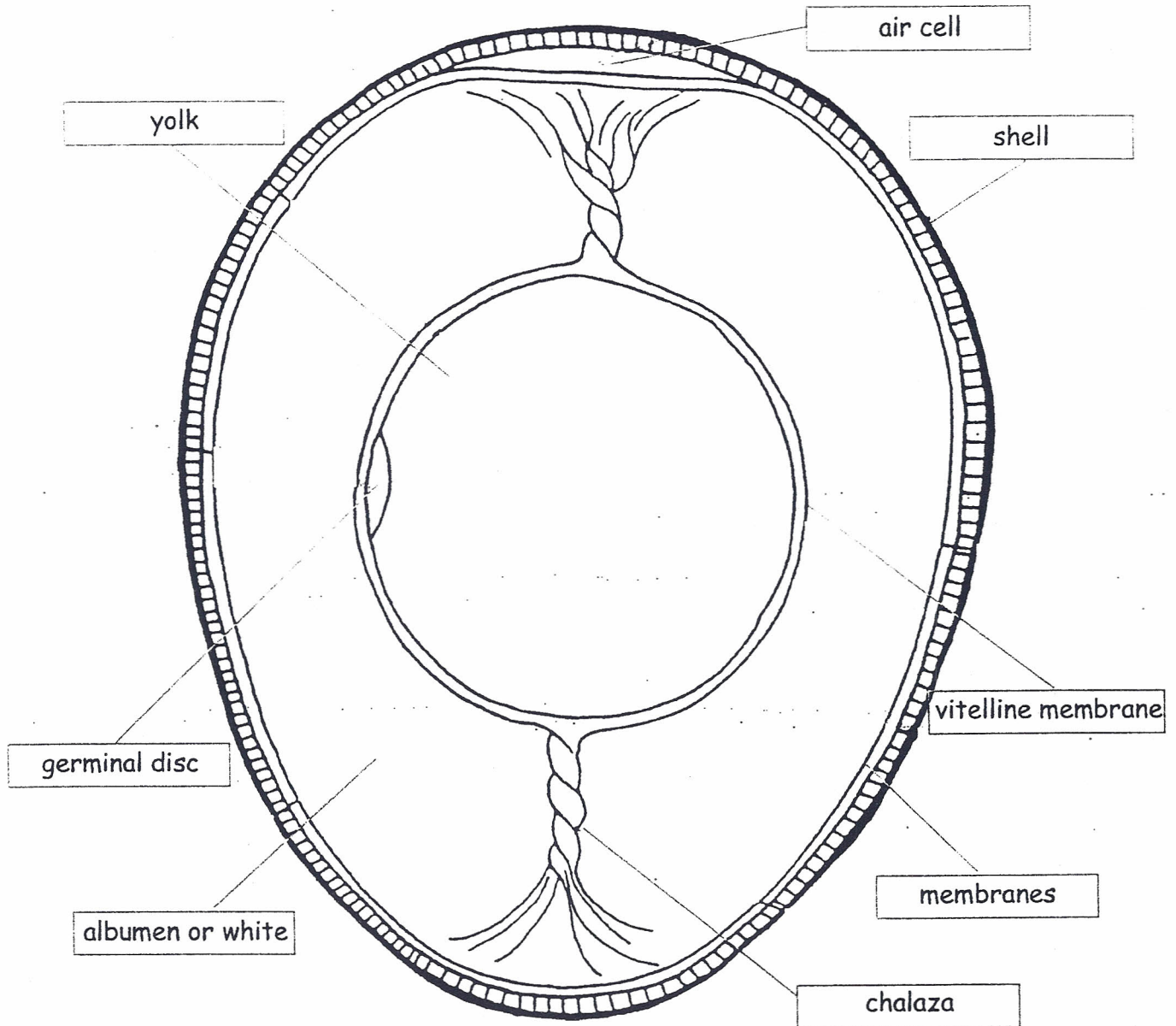
albumen or white
membranes
yolk

chalaza
shell

KEY

Egg Parts

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



Use each word only once:

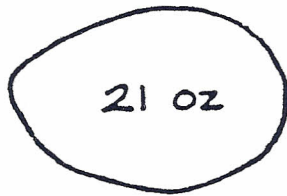
air cell
germinal disc
vitelline membrane

albumen or white
membranes
yolk

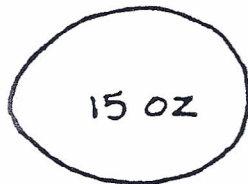
chalaza
shell

Egg Sizing

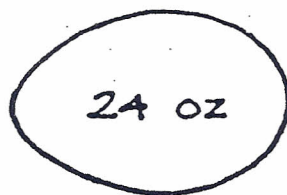
Match the egg to its size.



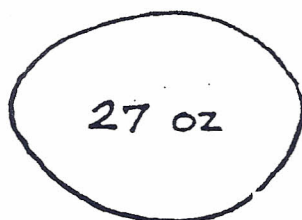
Pee Wee



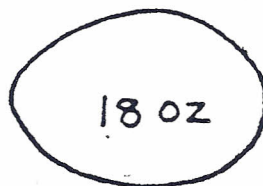
Medium



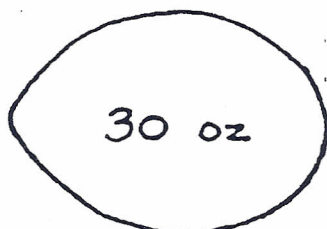
Small



Large



Extra Large

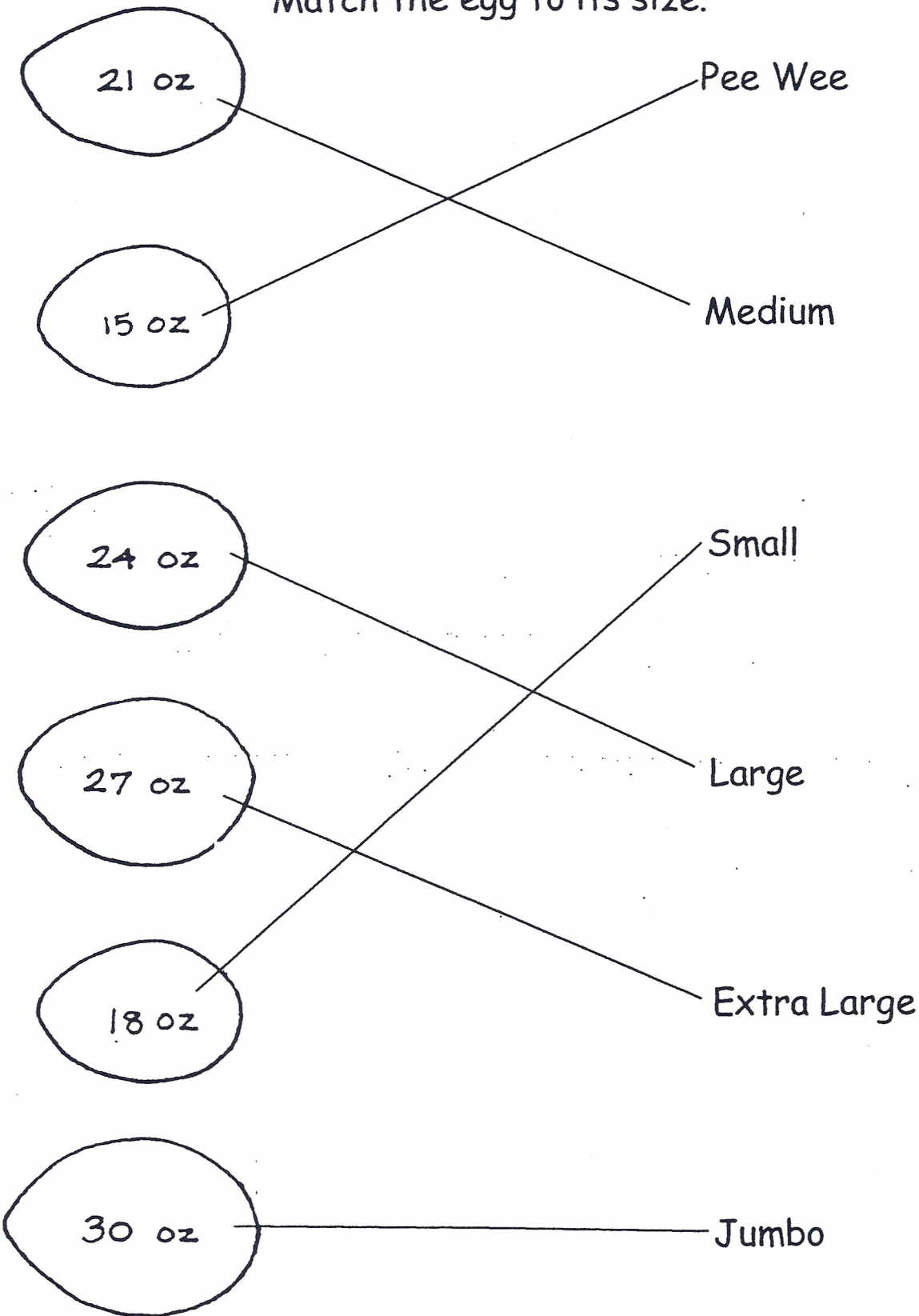


Jumbo

KEY

Egg Sizing

Match the egg to its size.



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 ____

KEY

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.

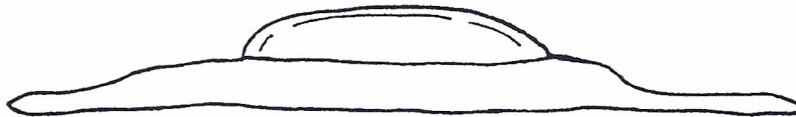
The grade of eggs can change if eggs are not stored correctly or if eggs are kept for a long time in the refrigerator.



Grade A



Grade B



Grade AA

Unscramble the Scrambled Eggs



1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

Unscramble the Scrambled Eggs

KEY



1. egg

2. hen

3. yolk

4. hatch

5. shell

6. embryo

7. beak

8. chicken

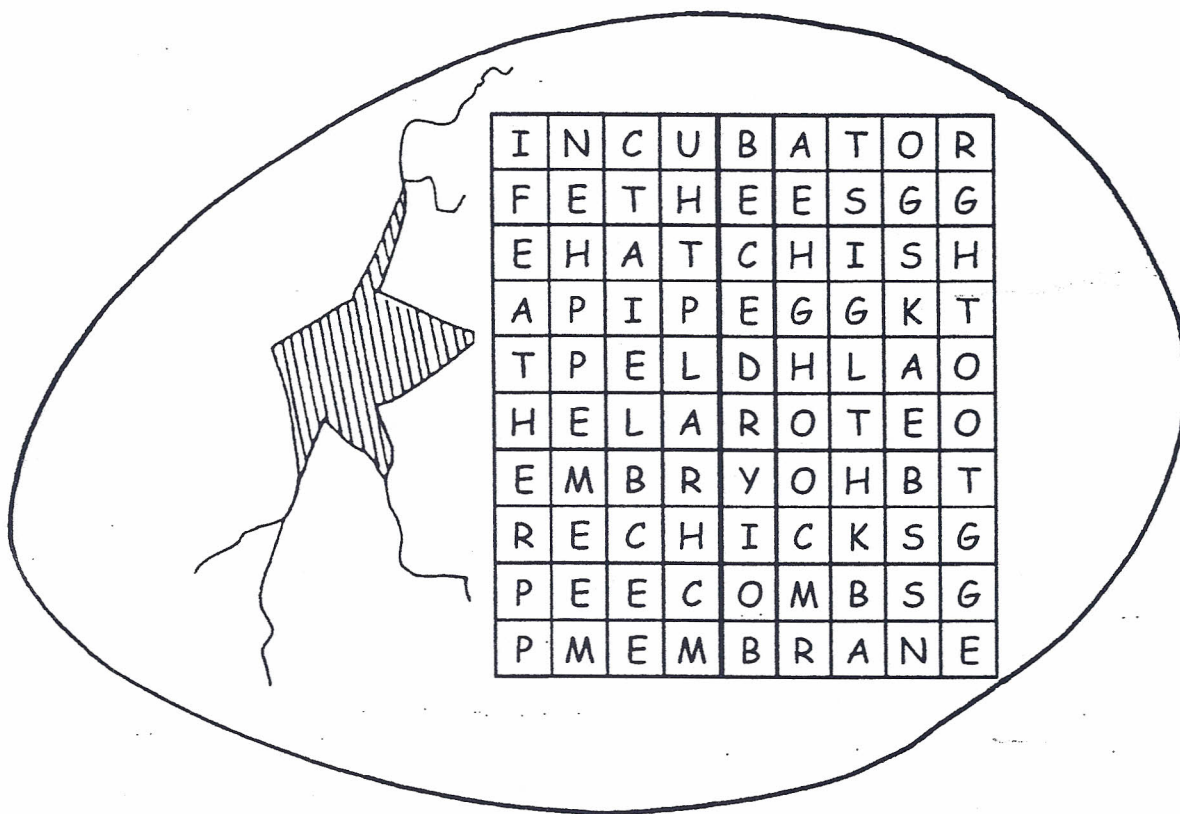
9. incubator

10. wings

11. temperature

12. fertilized

Hidden Words



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?

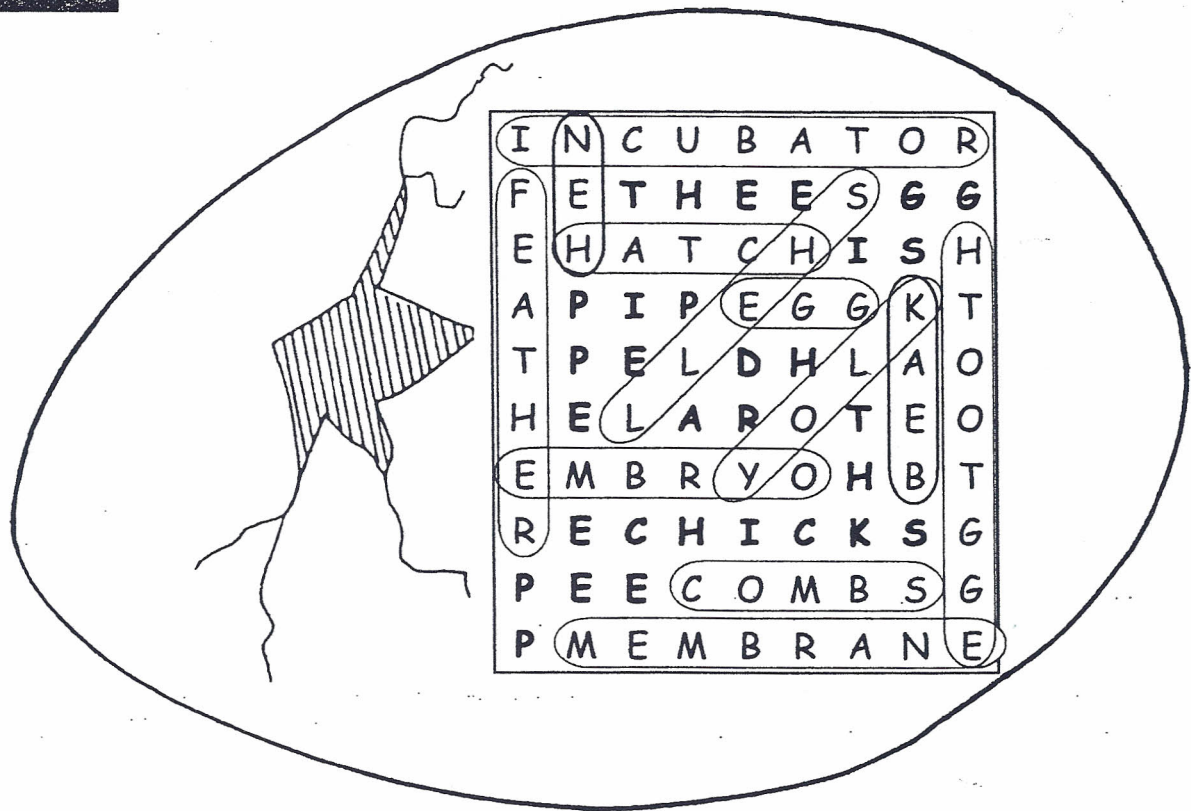
The message is _____

Words to find

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

Hidden Words

KEY



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 PIPPED 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. _____ | 13. _____ |
| 2. _____ | 14. _____ |
| 3. _____ | 15. _____ |
| 4. _____ | 16. _____ |
| 5. _____ | 17. _____ |
| 6. _____ | 18. _____ |
| 7. _____ | 19. _____ |
| 8. _____ | 20. _____ |
| 9. _____ | 21. _____ |
| 10. _____ | 22. _____ |
| 11. _____ | 23. _____ |
| 12. _____ | 24. _____ |

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

KEY

Science Vocabulary

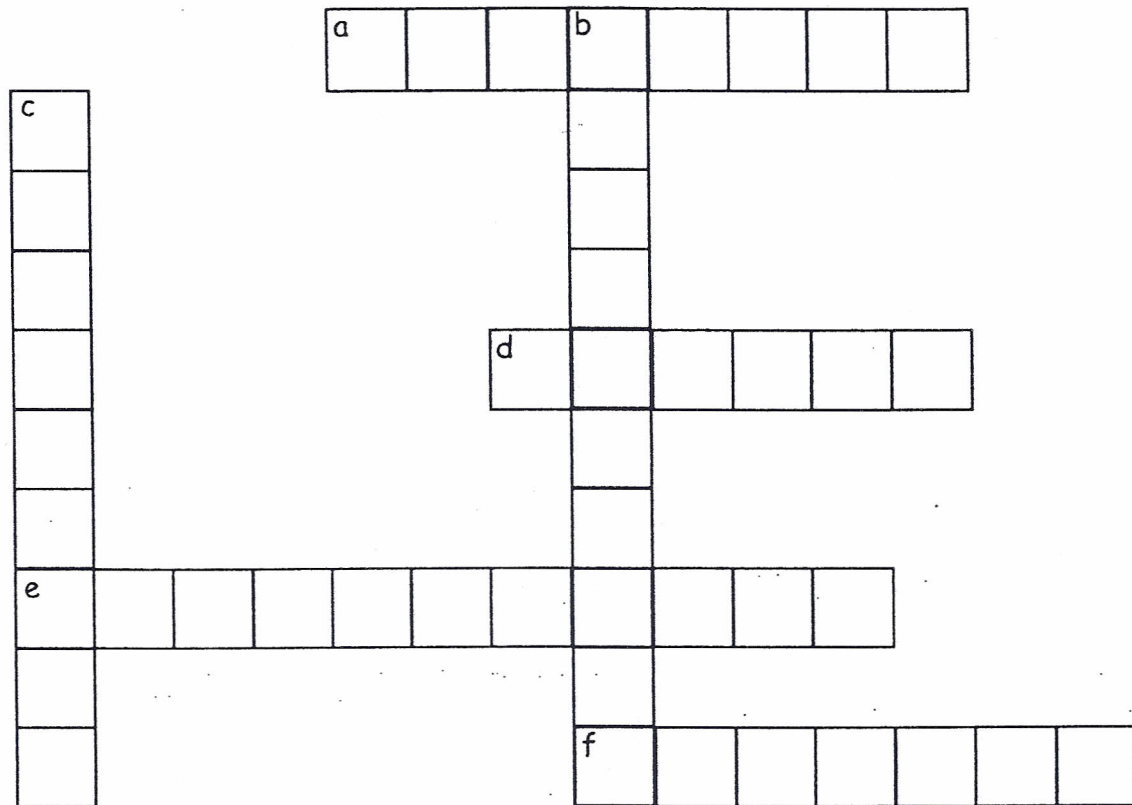
Put these words in alphabetical order.

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

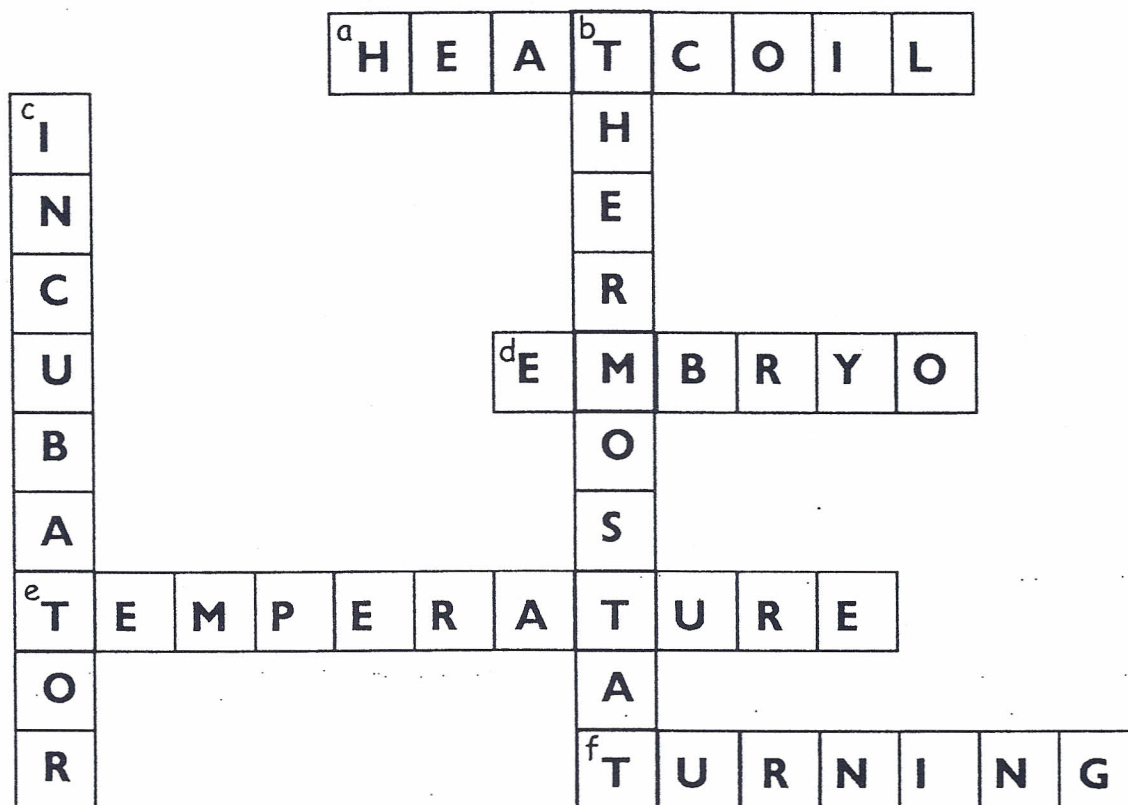
Choose 12 vocabulary words. Use each word in a complete sentence.

Crossword Puzzle

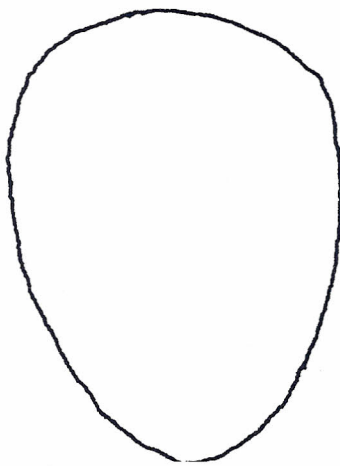
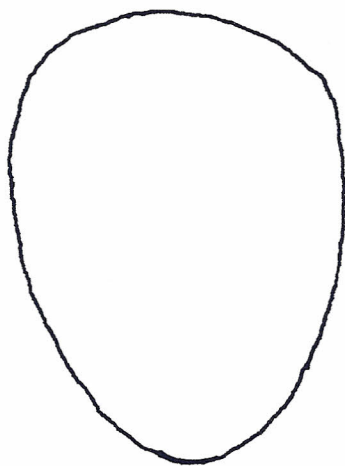
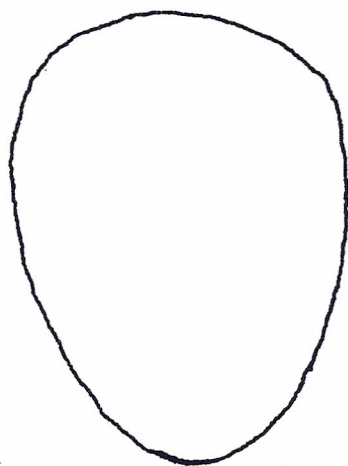
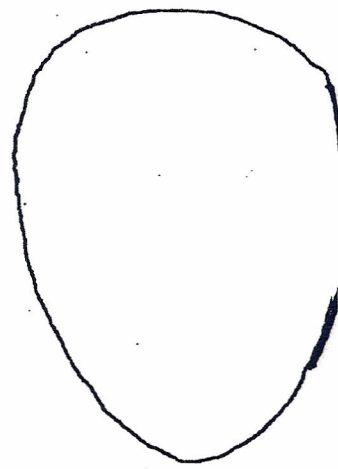
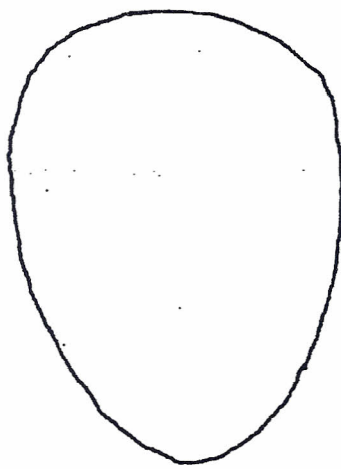
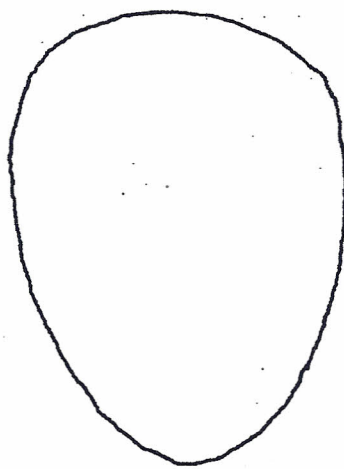
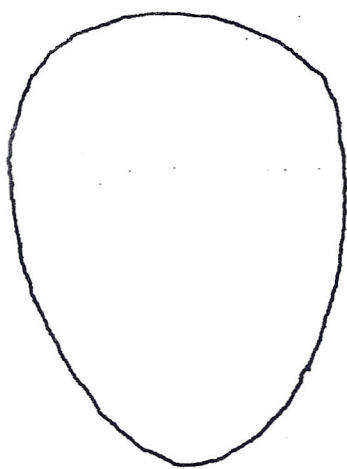
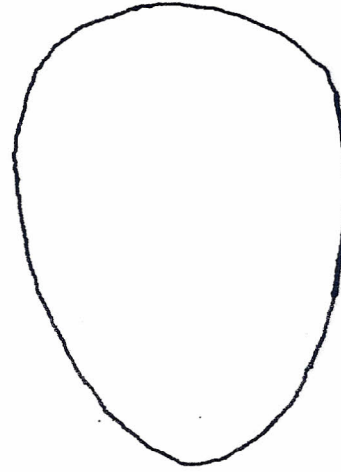
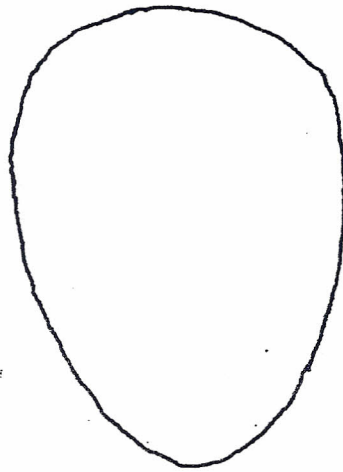
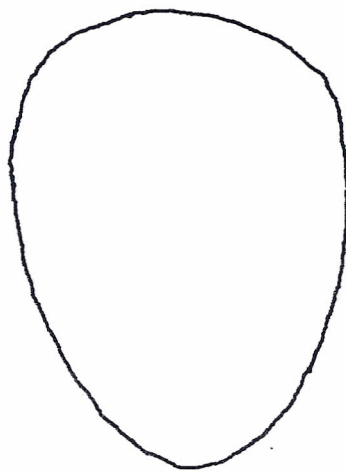
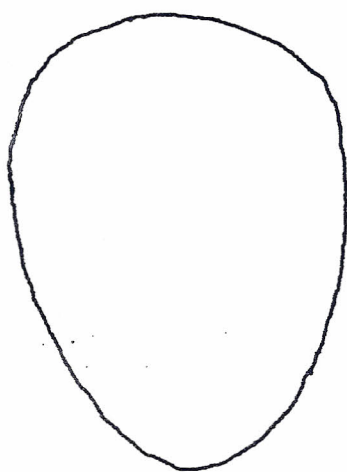
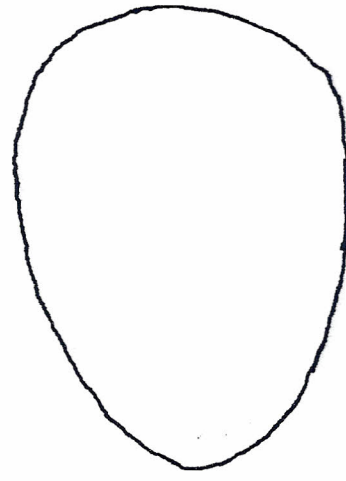
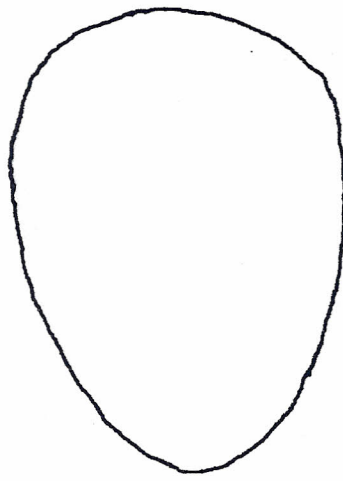
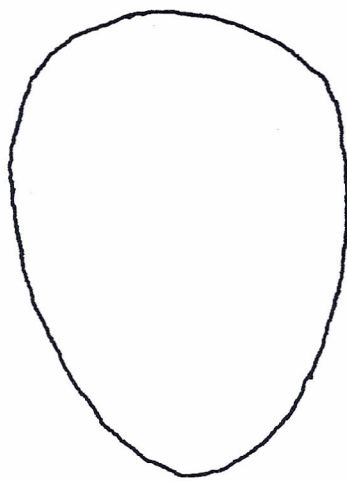
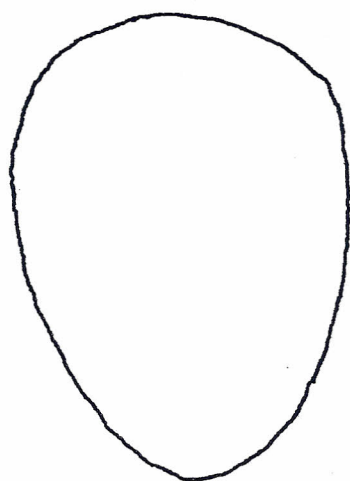


- a. (across) What heats the incubator? (two words)
- b. (down) What controls the light bulb and the heat in the incubator?
- c. (down) What do you use to incubate eggs?
- d. (across) What do you call an unborn chick?
- e. (across) What does a thermometer measure?
- f. (across) What job must be done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

Crossword Puzzle



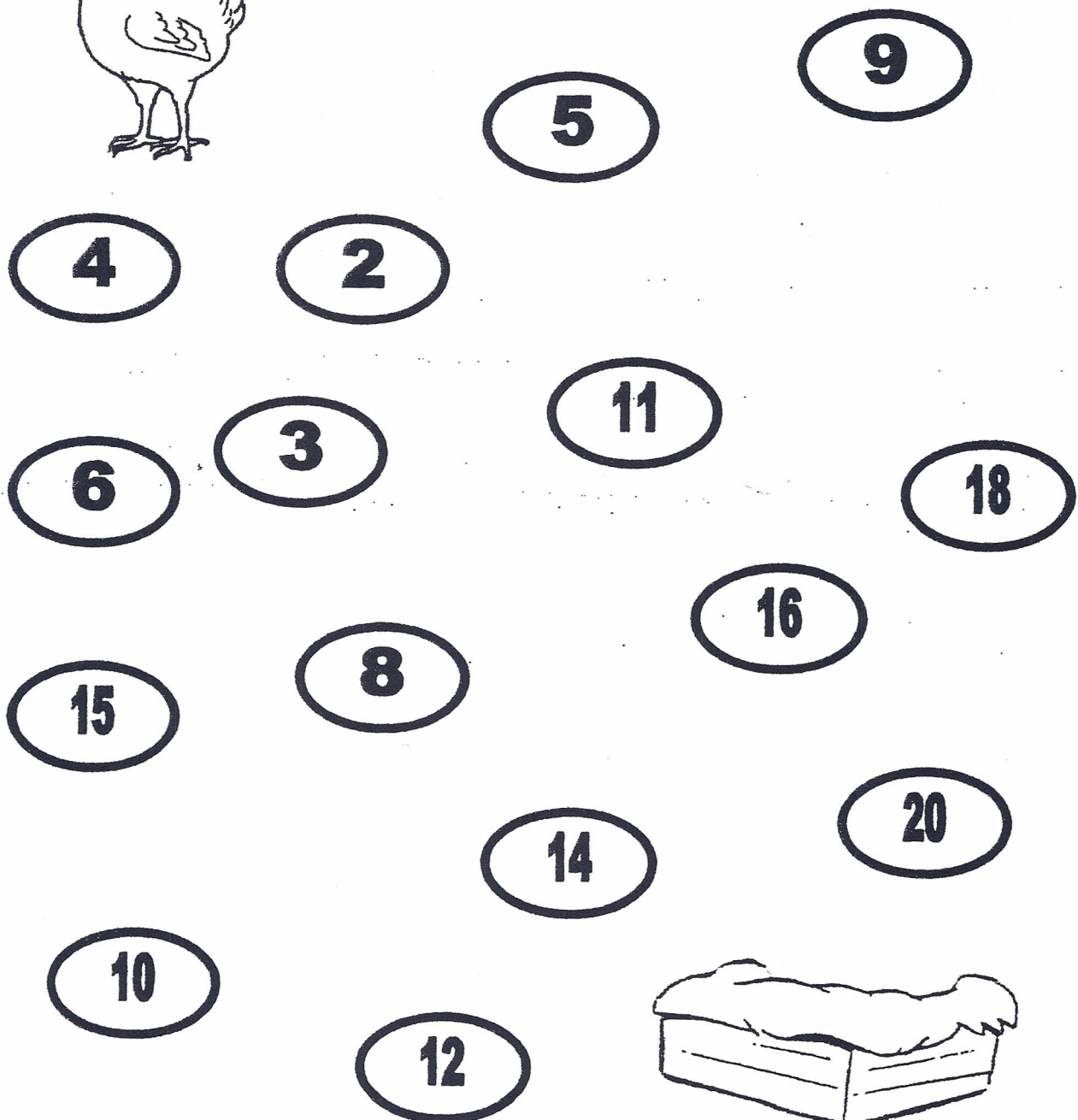
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- e. (across) What does a thermometer measure?
- f. (across) What job must be done with the eggs three or more times a day?



Name _____

Egg Maze: Counting by Twos

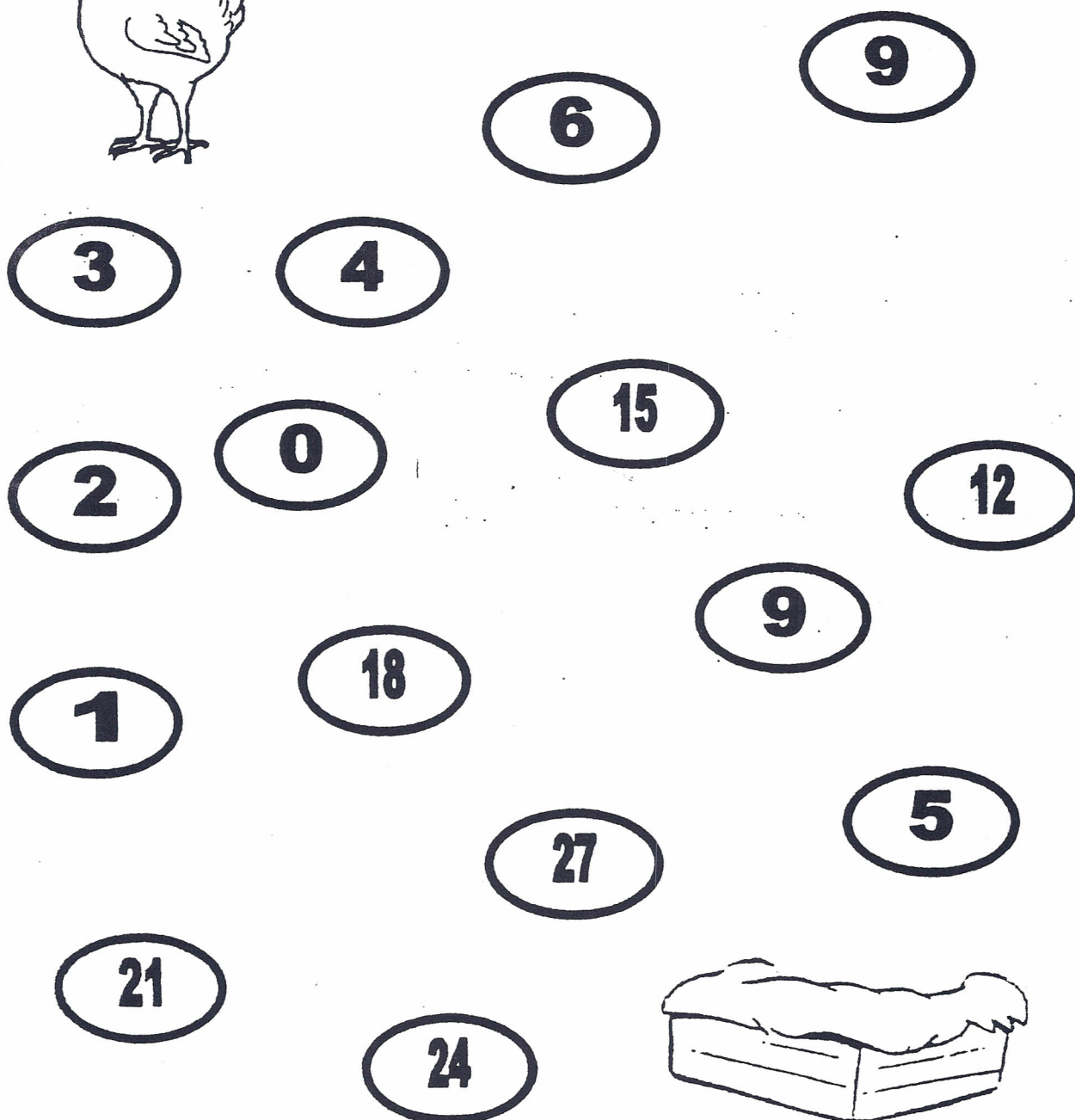
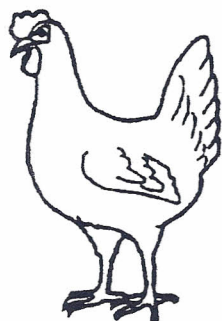
Help the hen get her nest by finding the path that counts by twos.
Draw a line to connect the path.



Name _____

Egg Maze: Counting by Threes

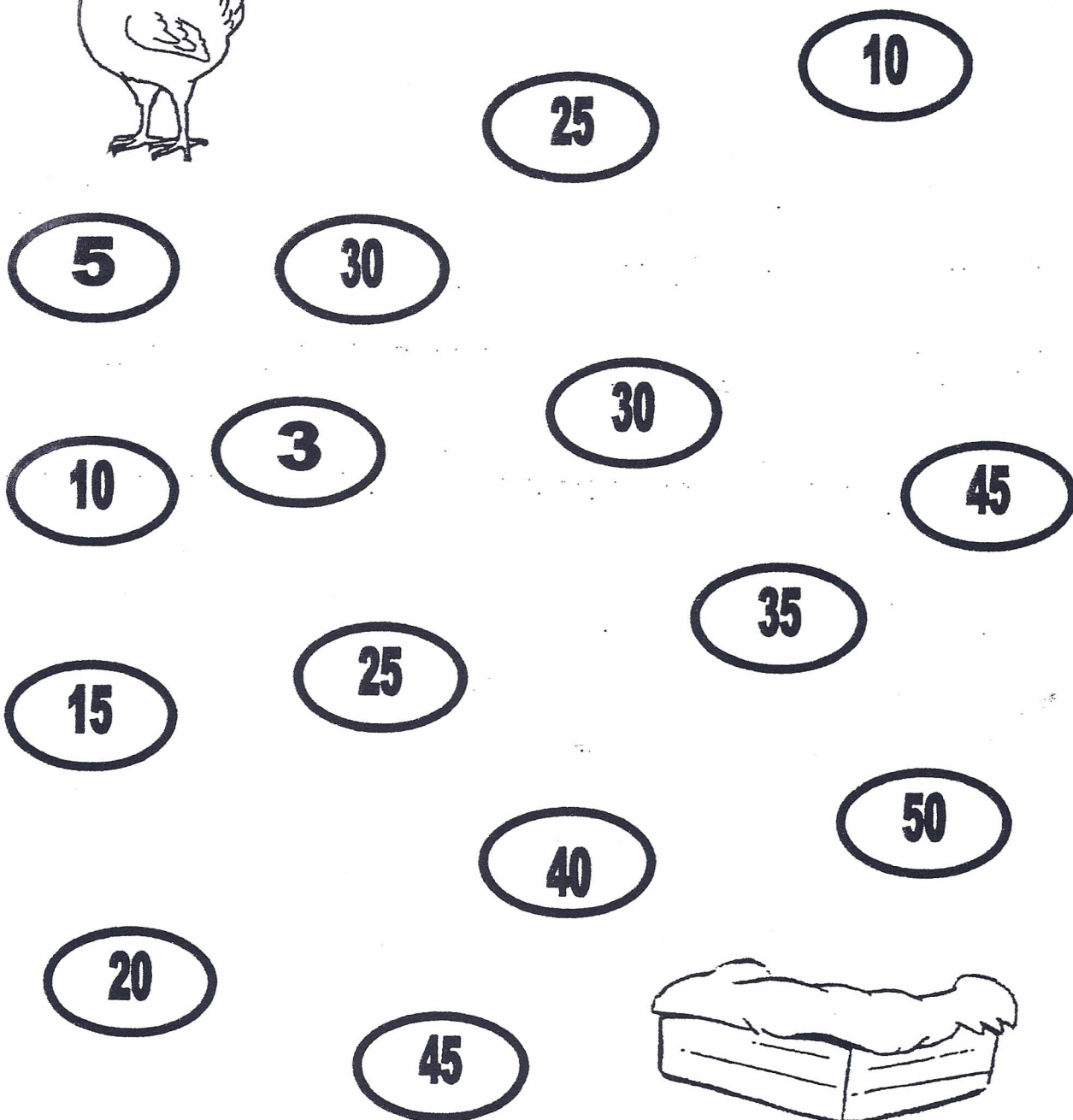
Help the hen get her nest by finding the path that counts by threes.
Draw a line to connect the path.



Name _____

Egg Maze: Counting by Fives

Help the hen get her nest by finding the path that counts by fives.
Draw a line to connect the path.



Additional Resources

Gibbons, Gail Chicks and Chickens

Sklansky, Amy E. Where Do Chicks Come From?

Heller, Ruth Chickens Aren't The Only Ones

Legg, Gerald From Egg to Chicken

Nelson, Robin From Egg to Chicken

Fowler, Allan The Chicken or the Egg?

Alabama Course of Study Standards

Science

Kindergarten - 3, 6

Grade 1 - 4

Grade 3 - 4

Grade 4 - 5

Grade 5 - 7, 9

Social Studies

Kindergarten - 2, 4

Grade 1 - 5

Grade 2 - 1, 5

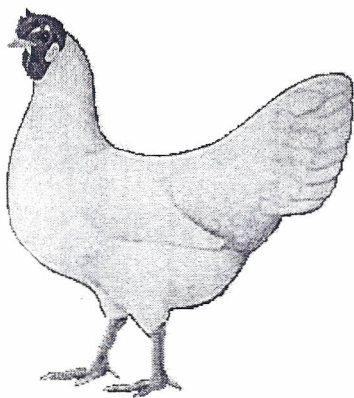
Egg-citing Poultry Facts



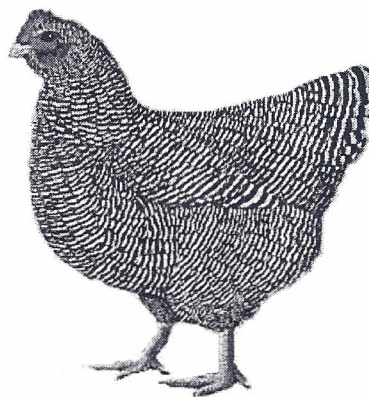
CHICKENS

There are more than 300 breeds of Chickens in the World. They can be egg layers, meat birds, dual purpose, ornamental or bantam (miniature).

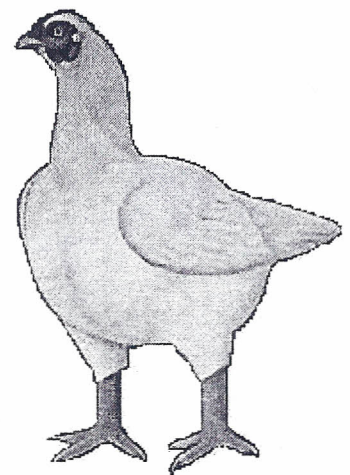
Would you believe... There are more chickens in the world than there are people!



Egg Laying Breed
Leghorn Hen



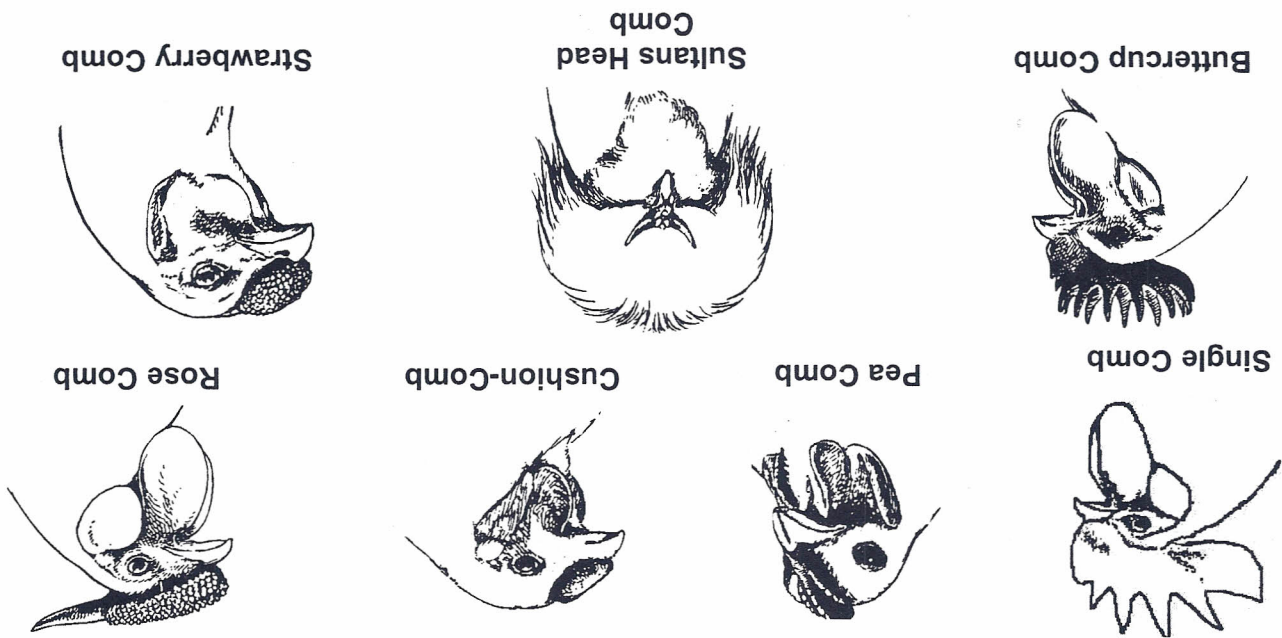
Dual Purpose Breed
Plymouth Rock-Barred Hen



Meat Breed
Cornish White Hen

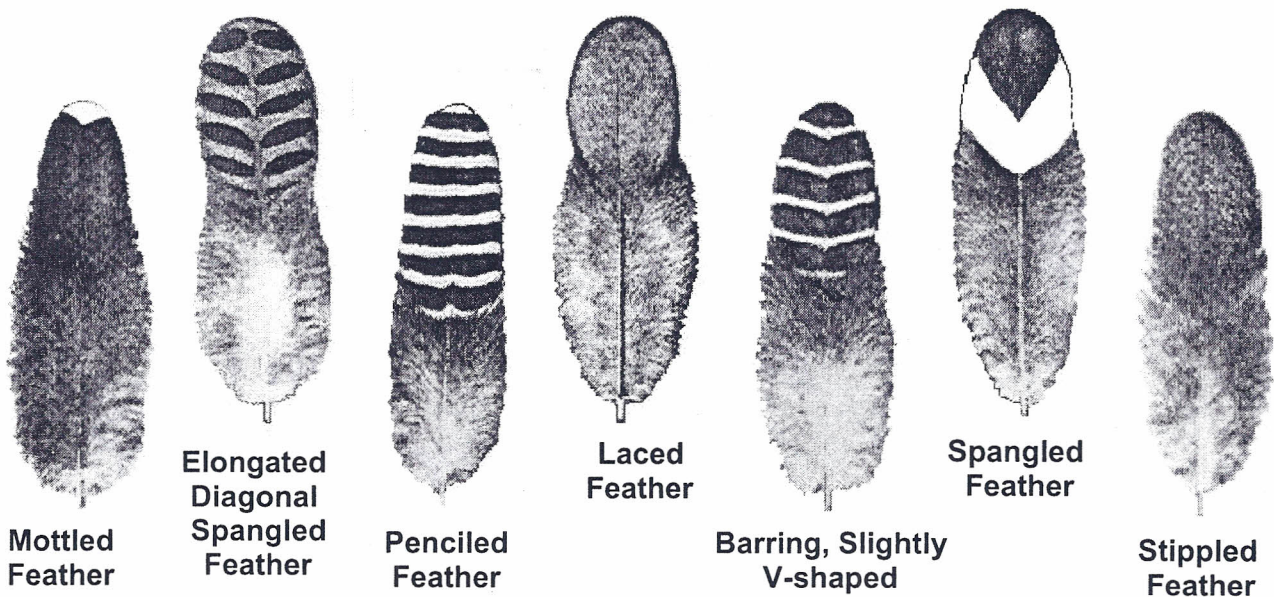
Types of Chicken Combs

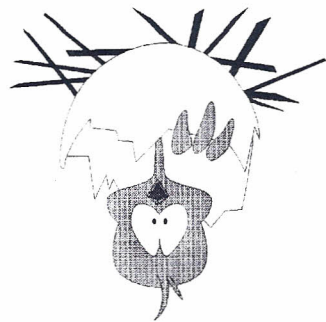
The comb is the colored decoration on the head of chickens. Waddles are the loose colored flap of skin below the beak. The earlobe is also loose and colored on many breeds.



Feathers vary in shape, color and texture in the various breeds and varieties of poultry. Feathers have barbs that hook together to form a web. That webbing keeps the top part of the feather smooth. The barbs do not hook together on the bottom of the feather creating a fluff. The fluff does not show, but helps keep the bird warm.

Beautiful Feather Patterns





Peafowl - 28 days

Emu - 50 days

Ostrich - 42 days

Quail - 17-23 days

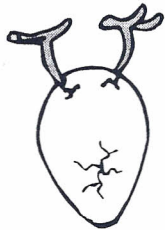
Pheasant - 23-24 days

Turkey - 28 days

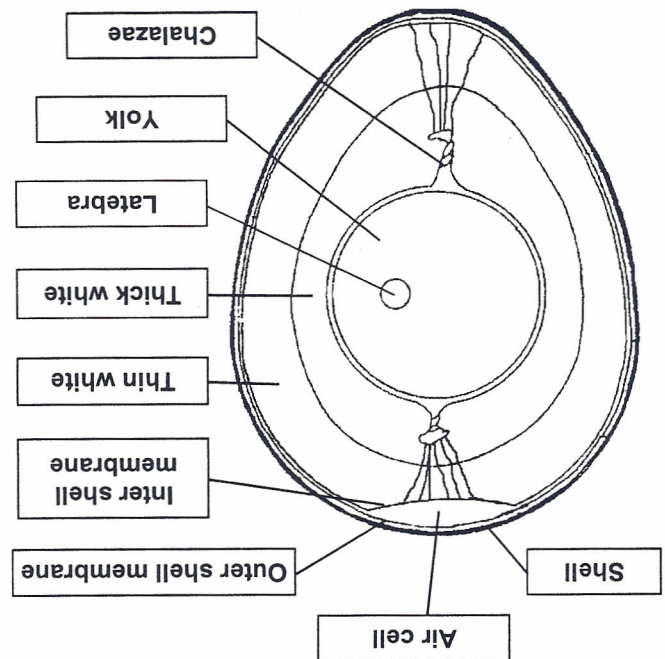
Goose - 29-31 days

Duck - 28 days

Chicken - 21 days

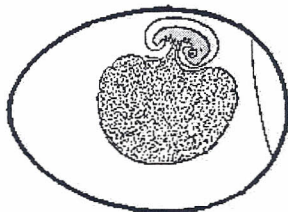


Incubation Time



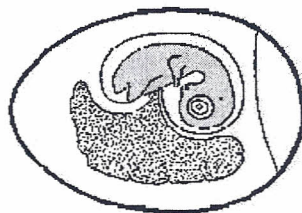
What's in an egg?

21 Special Days Before Hatching



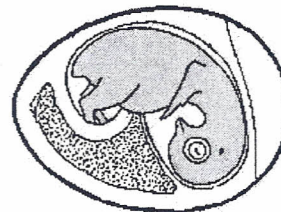
day 4

16 hours: first sign of embryo
22 hours: beginning formation of head
24 hours: beginning formation of eyes
25 hours: beginning formation of heart
35 hours: beginning formation of ear
42 hours: heart beats
day 3: tail, wing, and legs begin to appear distinguished



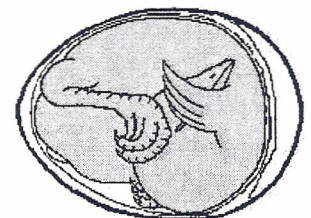
day 11

day 6: beginning formation of beak and egg tooth;
day 8: feathers begin
day 11: beak begins to harden
day 12: continued growth and movement



day 15

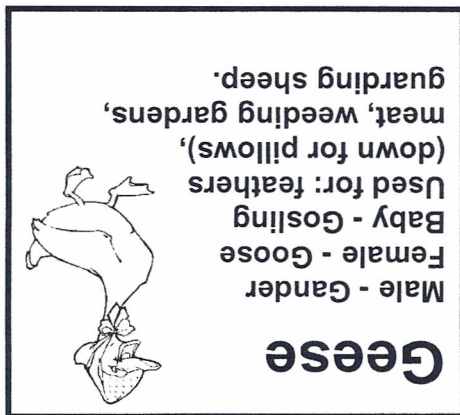
day 13: appearance of scales and claws
day 14: Embryo turns its head toward blunt end of the egg
day 15: scales, claws and beak becoming



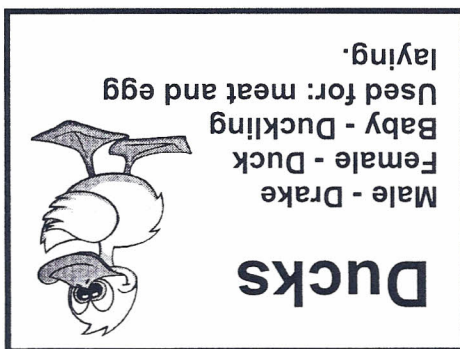
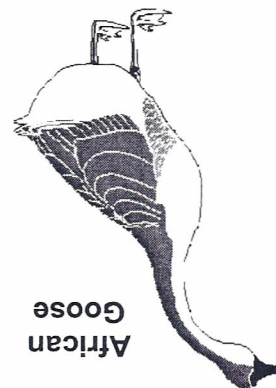
day 20

day 17: beak turns toward air cell
day 19: yolk sac begins to enter body cavity
day 20: yolk in body, chick fills all of egg space except air cell
day 21: chick hatches





Geese can swim, but they spend more time on land. They prefer to eat grass and weeds. Geese will weed a garden and never eat the growing vegetables. Geese are excellent on guard duty. They will hiss and even attack and pinch an intruder.
An average goose weighs 11 ounces. The largest goose egg weighed 2 pounds and was larger than a football.



Ducks are water lovers. They can dip their heads underwater to find food. You can tell the drakes (male ducks), they have a curl on the top of their tail.



Fascinating Fowl Facts

Answers on the

- How many chickens are there in the world?
a. 3 billion b. 5 billion c. 7 billion
- How many chickens are raised in the U. S. each year for egg production?
a. 100 million b. 300 million c. 500 million
- How many eggs are produced in the U. S. each year?
a. 25 billion b. 45 billion c. 65 billion
- How many eggs does the average laying hen lay in one year?
a. 245 b. 185 c. 305
- How many chickens does the average American eat each year?
a. 20 b. 30

Male - Rooster
Female - Hen
Baby - Chick
Used for: meat,
and laying eggs.

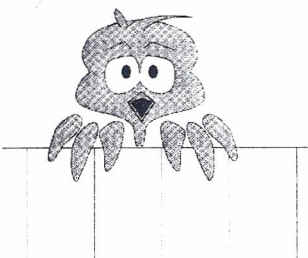


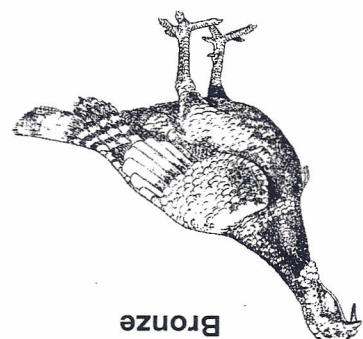
Chickens

The record number of eggs layed by a hen in one year was 371.

Largest chicken egg ever layed weighed 1 lb.

- How many days does it take to raise a chicken for meat?
a. 100 days b. 70 days c. 40 days





Bronze

Native Americans once raised turkeys for much more than just food. In the past, they used turkey bones to make spoons and beads. Turkey claws were made into arrowheads. And turkey feathers were used to make warm cloaks for winter. Because it is native to North America, Benjamin Franklin wanted the turkey, instead of the bald

The biggest stuffed turkey ever served weighed 86 pounds.



The turkeys we eat are large white birds that grow very fast. After hatching, the turkeys are ready for market in four to five months. California ranks fifth in the nation in turkey production. In 1996 California farmers raised over 490 million pounds of turkey.

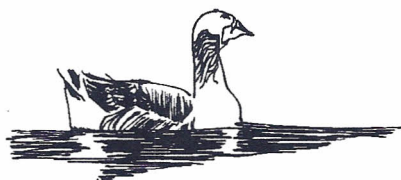


Commercial White Turkey

Waterfowl Fascinating Facts

How ducks and geese keep dry in the water.

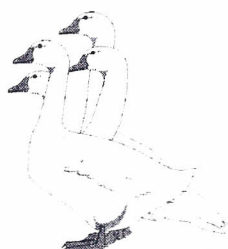
Water runs off the feathers of waterfowl because the feathers have oil on them. The oil comes from a special gland and the birds use their bill to spread it on their feathers.



How ducks and geese

Waterfowl have little air sacs in their body that are like little balloons. When the sacs are filled with air, they help keep the bird up in the water. When the bird wants to dive they pump the air out of the air sacs. With less air the bird sinks.

How to tell if a bird is a duck or goose.



Check out the beak. Ducks have long beaks that are wide and flat. Geese have beaks that are shorter and more rounded. The beak shapes are related to the kinds of food the bird eats.

Why ducks and geese


Ducks and other waterfowl waddle because their legs are short and are placed rather far apart on their bodies. When a duck walks, it must shift most of its body weight over the foot that is on the ground.




**Fascinating
Fowl Facts**

1-c, 2-b,
3-c, 4-a,
5-a, 6-c.

Answers



Ratites - Flightless Birds

Male - Male
Female - Hen
Baby - Chick
Used for: meat, feathers
and hide.

Ostriches can grow to be 9 feet tall and weigh 400 pounds. Emus can be 6 feet tall and can weigh 150.

Ostrich and emu meat is red meat similar to beef, but it is lower in fat than beef, chicken or turkey.

An Ostrich can grow 10 to 12 inches a month for the first six months of it's life.

Ostrich feathers make great feather dusters. The ostrich and emu hides make very beautiful leather for boots, purses, jackets and other leather products.

Ostriches can run 40 miles per hour. They are the only bird with two toes.

Ostriches originally came from Africa and emus came from Australia.



Ostrich
The largest birds
alive, with the
largest eggs.



An Ostrich
egg weighs 3
to 6 pounds.



Emu
Second
largest bird.

