

All About Eggs

Activity Pack

GRADES
K-8

Name: _____

Egg Gravity Test

Can a ramp keep my eggs from breaking??

Materials:

- Fresh eggs
- Paper plate
- Cardboard
- Scissors or utility blade
- Ruler
- Tape

Procedure:

1. Drop an egg from approximately 12 inches. What happens? How is gravity at work?
2. Sketch a design for a ramp that could help gravity. How long would the ramp need to be to keep an egg from falling off the ramp?

Build a ramp using the materials provided. Test your design by dropping an egg from the ramp. What happens? If it breaks, redesign your design.

Name: _____

EGGS... Sized-up!

Egg size, typically noted on the carton, tells consumers the minimum required weight for a dozen eggs. Use the information given to determine the average weight of each egg. Represent your answer in decimal form, round to the nearest 10th.

Weight Per Dozen	Average Weight (in ounces)
30 ounces	
27 ounces	
24 ounces	
18 ounces	
15 ounces	

Did you know?

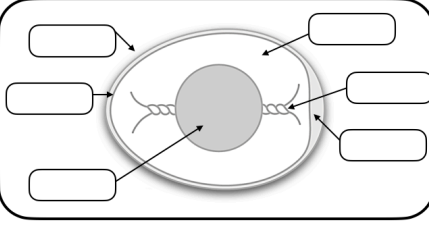
Over 1 billion California egg farmers produced approximately 3.9 billion eggs, making California the largest producer of eggs in the U.S.

5th-6th Grade Math

Name: _____

Anatomy of an Egg

Use the descriptions of each functioning part to label the egg.



Like all living things, eggs consist of functioning parts that protect the egg and provide nutritional benefits for use!

Shell: Made mostly of calcium carbonate (CaCO₃) and covered with more than 17,000 pores, the shell provides protection.

Shell membrane: Two strong transparent membranes protect the egg. Made partly of keratin, a protein that's also in human hair.

Yolk: The yellow portion of the egg is a major source of iron, vitamin A, vitamin D, phosphorus, calcium, thiamine and riboflavin.

Albumen: Commonly known as the "egg white," the albumen contains approximately 40 different proteins.

Air cell: A pocket of air caused by the contraction of the contents while the egg cools after being laid.

Chalazae: This cord-like strand anchors the egg yolk in the center of the white.

3rd Grade Science

5 ACTIVITIES

THANK YOU

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GRAPHICS



STANDARDS

Activity: Eggs...Sized-Up!

CCSS.MATH.CONTENT.4.MD.A.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

CCSS.MATH.CONTENT.4.NBT.B.6

Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

CCSS.MATH.CONTENT.5.NBT.A.4

Use place value understanding to round decimals to any place.

CCSS.MATH.CONTENT.5.NBT.B.7

Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Activity: Anatomy of An Egg

4-LS1-1

Construct an argument that plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.

MS-LS1-4

Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

CCSS.ELA-LITERACY.RI.3.7

Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

CCSS.ELA-LITERACY.RI.4.7

Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

Activity: Egg Folklore

CCSS.ELA-LITERACY.RI.3.7

Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

HSS-3.1

Students describe the physical and human geography and use maps, tables, graphs, photographs, and charts to organize information about people, places, and environments in a spatial context.

HSS ANALYSIS SKILLS-4

Students use map and globe skills to determine the absolute locations of places and interpret information available through a map's or globe's legend, scale, and symbolic representations.

Activity: Egg Gravity Test

K-PS2-2

Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.

K-2-ETS1-1

Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

K-2-ETS1-2

Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

3-5-ETS1-1

Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-3

Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

Activity: An Egg's Journey

CCSS.ELA-LITERACY.RI.K.1

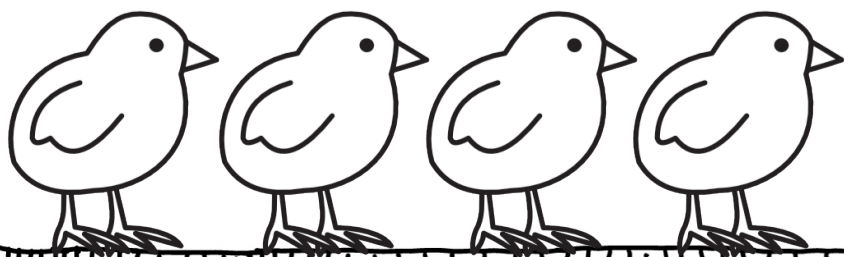
With prompting and support, ask and answer questions about key details in a text.

CCSS.ELA-LITERACY.RI.1.1

Ask and answer questions about key details in a text.

CCSS.ELA-LITERACY.RI.2.1

Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.



Name: _____

EGGS . . . Sized-up!

Egg size, typically noted on the carton, tells consumers the minimum required weight for a dozen eggs. Use the information given to determine the average weight of each egg. Represent your answer in decimal form, round to the nearest 10th.

Size	Weight Per Dozen	Average Weight (in ounces)
Jumbo	30 ounces	
Extra Large	27 ounces	
Large	24 ounces	
Medium	21 ounces	
Small	18 ounces	
Peewee	15 ounces	

Did You Know?

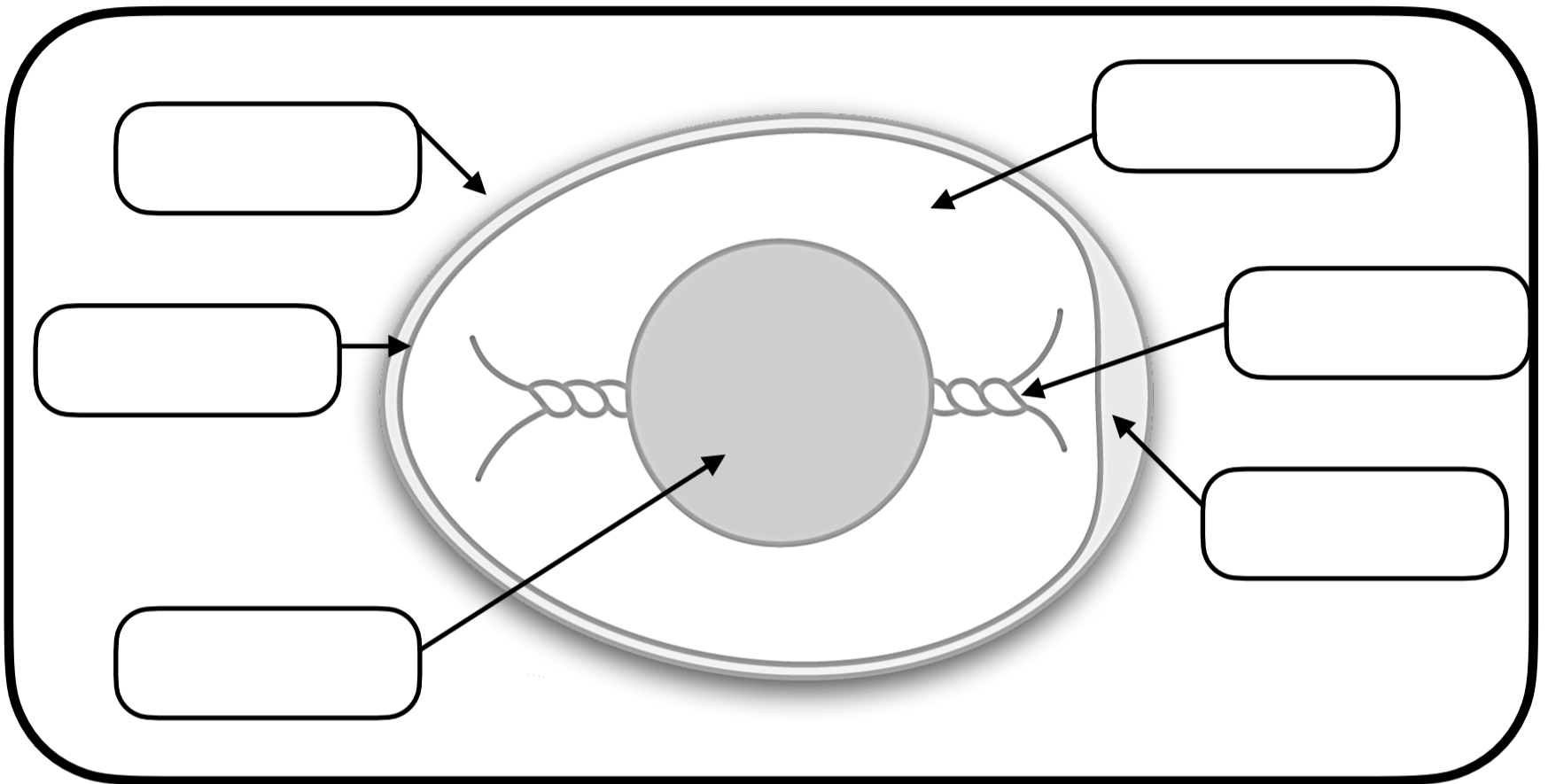
In 2019, California egg farmers produced approximately 3.9 billion eggs, making California the 6th largest producer of eggs in the U.S.



Name: _____

Anatomy of an Egg

Use the descriptions of each functioning part to label the egg.



Like all living things, eggs consist of functioning parts that protect the egg and provide nutritional benefits for us!

Shell: Made mostly of calcium carbonate (CaCO_3) and covered with more than 17,000 pores, the shell provides protection.

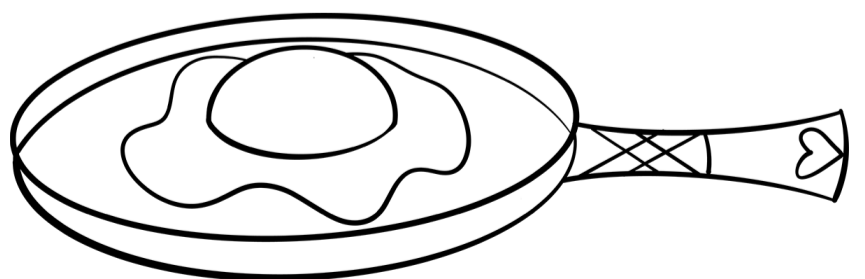
Shell membrane: Two strong transparent membranes protect the egg. Made partly of keratin, a protein that's also in human hair.

Yolk: The yellow portion of the egg is a major source of iron, vitamin A, vitamin D, phosphorous, calcium, thiamine and riboflavin.

Albumen: Commonly known as the "egg white," the albumen contains approximately 40 different proteins.

Air cell: A pocket of air caused by the contraction of the contents while the egg cools after being laid.

Chalazae: This cord-like strand anchors the egg yolk in the center of the white.



Name: _____

Egg Folklore

Use a detailed world map to find the approximate location of each country.
Label each country with its corresponding number.

1
According to Chinese lore, the beginning of creation started with an egg.

4
In France, red eggs were offered to ensure a good harvest.

2
Mexico has a tradition of cracking confetti-filled eggs on people's head to celebrate birthdays.

3
Ancient Persians were the first people known to exchange eggs dyed in festive colors to celebrate summer equinox.

5
The Native American Navajo tribe, believed that a sacred figure, the Great Coyote Who Formed in the Water, hatched from an egg.

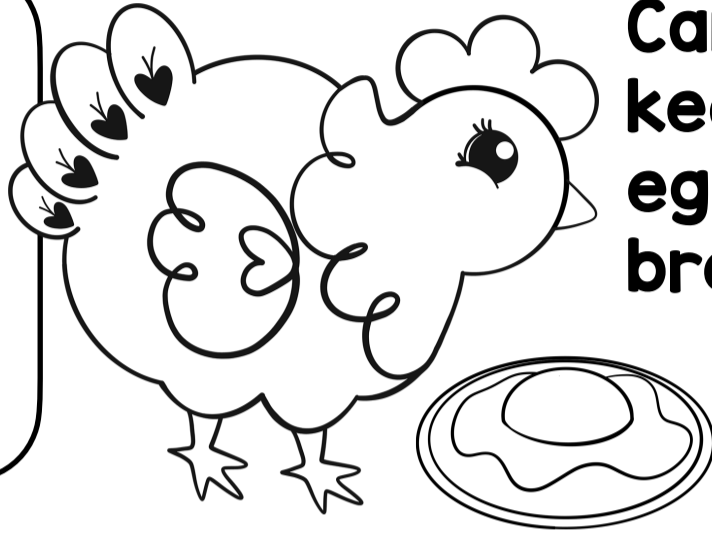


Name: _____

Egg Gravity Test

Materials:

- Fresh eggs
- Paper plate
- Cardboard
- Scissors or utility blade
- Ruler
- Tape



Can a ramp keep my eggs from breaking??

Procedure:

1. Drop an egg from approximately 12 inches above a paper plate. What happens? How is gravity at work?
2. Sketch a design for a ramp that could reduce the full force of gravity. How long would the ramp need to be? What will keep the egg from falling off the ramp?
3. Build a ramp using the materials provided. Ask a grown-up to help with cutting the cardboard.
4. Test the ramp. What happens? If the egg broke, how could you modify your design?

Name: _____

An Egg's Journey

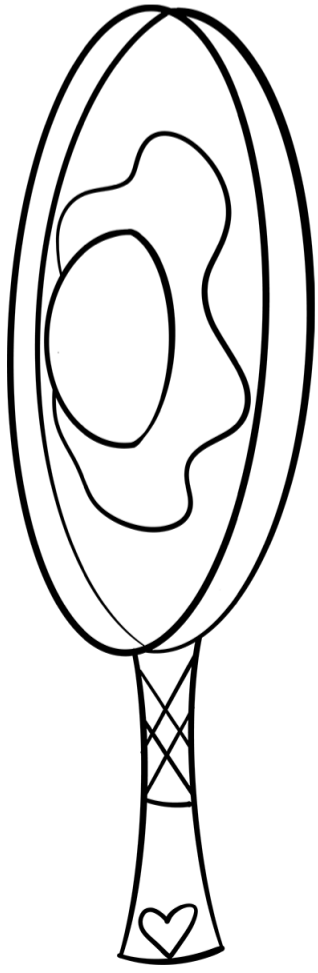
1. What animal lays the egg?

2. How are the eggs sorted?

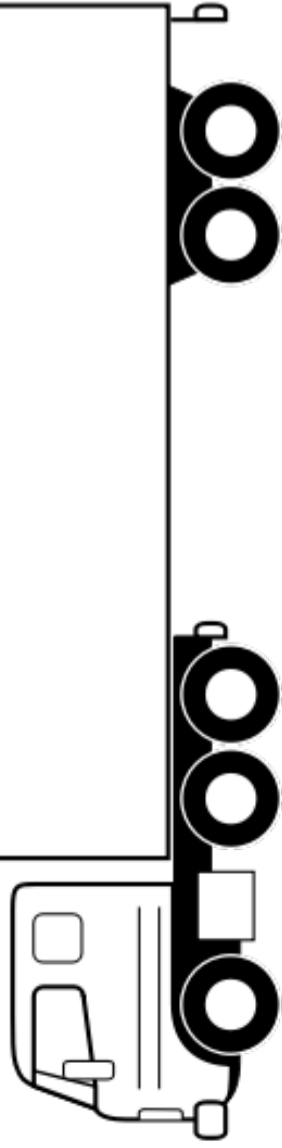
3. How do eggs get to the store?

4. Predict what happens to the eggs after they are bought.

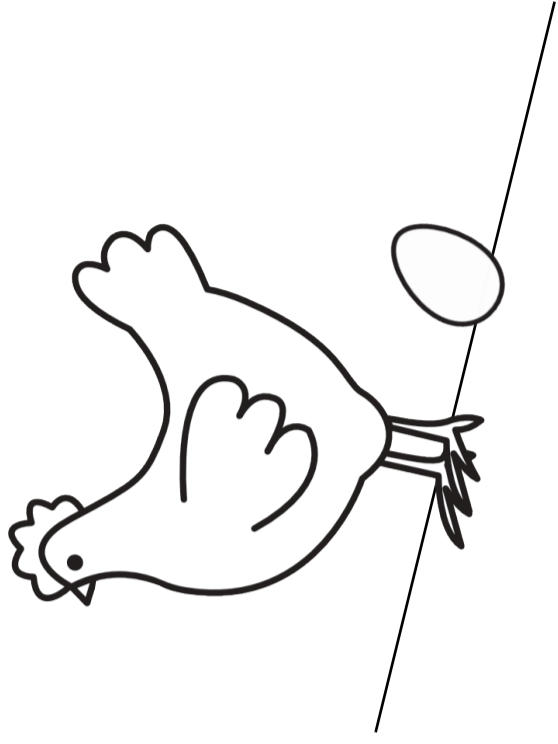
An Egg's Journey



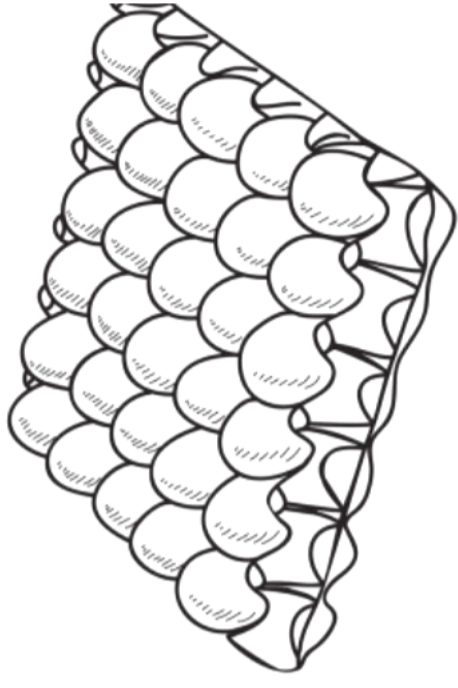
Name: _____ |



A truck drives the eggs
to the store. Someone
buys the eggs.



A hen lays an egg. The egg
rolls onto a moving belt.



Eggs are packed in trays.
Each egg is carefully looked
over and sorted by size.