

Title: Egg Puzzles

Subject Area: Mathematics

Key Stage 3

NC link: Ma2/1

Learning Objective:

- Children solve problems in whichever way they choose.
- Comparing the weight of eggs in pounds and grams.

Resources:

- A photocopy of the puzzles
- Some eggs
- Scales showing pounds and grams.

Starter

Weigh an egg in front of the class and put its weight in pounds and grams onto the board.

Main Teaching Activity:

Pupils work out the following puzzles

- The average hen lays 257 eggs a year. On average how often does she lay an egg over a whole year?
- Eggs are a popular food. In 2001/2002 the government worked out that an average of 165grams of egg were consumed by each person per week in the UK , How many eggs would that be? How many grams is this per month? Year? Can you figure out how many dozen sized cartons of eggs that would be?
- In the UK in 2004, hens produced 746760000 dozen eggs! Of all these eggs 16.8% of them were sold to egg processors. 73625 tonnes of them were broken to make into liquid, frozen, dried or specialty egg products. It would take a very long time for human hands to break these eggs. Instead, special machines break the shells and even separate the yolks and whites. These machines work very fast. One machine can break 108000eggs an hour. Can you work out how many eggs the machine can break each minute? Second?

Plenary

- Discuss the calculations and solutions to the problems. Ask: How could we check the answers?

Differentiation

Hint: an egg weighs on average 70 grams.

Answers: 1) approximately 34 (34.085603) hrs

2) Approximately 10 large eggs per person per month, 123 per year, 10 cartons of eggs. 3) 1800 eggs broken in 1 minute, 30 eggs broken in one second.

Egg Puzzles



Omlet
the art of keeping chickens

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