

5  
grade

# FACTFUL ENVIRONMENTAL MATH PROBLEMS

CULTIVATING SKILLS TO UNDERSTAND OUR **WORLD**

WITH **FACT-BASED NUMBERS**

WHILE IMPROVING **MATH** SKILLS

2020

HIDEKA YAMAGUCHI, PH.D.

**Blu**eggs  
environmental education

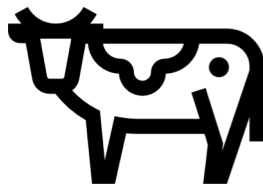
## WHOLE NUMBERS (MULTIPLICATION & DIVISION)



How much water  
does it take  
to produce a beefsteak?

All foods you eat every day need water to be produced. Among them, producing beef requires one of the most water. It takes 345 gallons of water to produce a 3 oz. beefsteak, which is a recommended serving as part of a healthy meal.

1. Producing one apple takes 33 gallons of water. How many apples can you produce with 345 gallons of water?
2. Producing an egg takes 52 gallons of water. Which takes more water, producing 7 eggs or a 3 oz. beefsteak?
3. Producing a 3 oz. grilled chicken takes 71 gallons of water. You ate  $\frac{1}{3}$  of a 3 oz. beefsteak for lunch today. Which takes more water, producing a 3 oz. grilled chicken or  $\frac{1}{3}$  of the 3 oz. beefsteak you ate for lunch today?



(Source: Water Footprint Network)

# ANSWER KEY

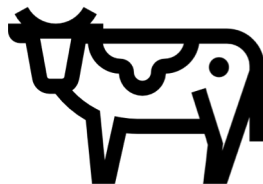
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All foods you eat every day need water to be produced. Among them, producing beef requires one of the most water. It takes 345 gallons of water to produce a 3 oz. beefsteak, which is a recommended serving as part of a healthy meal.

1. Producing one apple takes 33 gallons of water. How many apples can you produce with 345 gallons of water?  
**10 apples ( $345 \div 33 = 10 \text{ R } 15$ )**
2. Producing an egg takes 52 gallons of water. Which takes more water, producing 7 eggs or a 3 oz. beefsteak?  
**7 eggs (Producing 7 eggs takes 364 gallons of water)**
3. Producing a 3 oz. grilled chicken takes 71 gallons of water. You ate  $\frac{1}{3}$  of a 3 oz. beefsteak for lunch today. Which takes more water, producing a 3 oz. grilled chicken or  $\frac{1}{3}$  of the 3 oz. beefsteak you ate for lunch today?  
 **$\frac{1}{3}$  of a 3 oz. beefsteak ( $\frac{1}{3}$  of a 3 oz. of beefsteak takes 115 gallons of water :  $345 \div 3 = 115$ )**



(Source: Water Footprint Network)