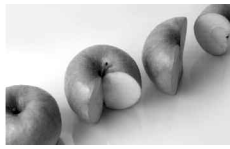




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Name \_\_\_\_\_ Class \_\_\_\_\_

# WORKSHEET

## Rates, Ratios and Proportions in Foods

When cooking protein products, it is especially important to use the correct cooking time for safety reasons and the prevention of food-borne illnesses. Complete the following word problems to practice this crucial meat-preparation skill.

*Example 1: A turkey weighing 21 lbs takes 7 hours to cook. What was the average cooking time per pound? (One hour is equal to 60 minutes)*

*Solve: Divide the number of pounds by the number of hours.*

$$21 \text{ lbs}/7 \text{ hours} = 3\text{lbs}/\text{hour}$$

$$\text{Next, divide } 60 \text{ minutes}/3 \text{ lbs.} = 20 \text{ minutes}/\text{pound}$$

*Answer: The amount of time it takes to cook one pound of turkey is 20 minutes.*

*Example 2: Mary's family wants to serve roast chicken for dinner. They have purchased two chickens that have a combined weight of 8 pounds. It is suggested that the chicken should cook 15 minutes for each pound. How long (in hours and minutes) will they need to cook the chicken?*

*To Solve: Multiply 8 pounds by 15 minutes:  $8 \times 15 = 120$  minutes. Next, divide 120 minutes by 60 minutes:*

$$120 \text{ minutes}/60 \text{ minutes} = 2 \text{ hours}$$

*Answer: The time needed to cook the chicken is 2 hours*

### SOLVE THE FOLLOWING PROBLEMS

1. The Johnson family is serving prime rib for their holiday dinner. Mrs. Johnson has purchased a 15 lb prime rib roast and will need to cook it for 3 hours. What is the average cooking time per pound?



2. If you purchase a 10 pound beef roast and it is suggested that you cook the roast for 3 hours and 20 minutes. What is the cooking time allotment for each pound?

3. The cut of the roast pork that you are making for dinner weights 4 pounds. Because of the cut, it is suggested that you roast the meat for 30 minutes/pound. How many hours will you need to cook the roast pork?

4. A turkey weighing 12 pounds took 4 hours to cook. What was the average cooking time per pound?

