A Week at the Animal Shelter (4th Grade)

Friends of Campbell County Animals need your help figuring out how many dogs they have passing through the adoption floor in a week. Recall that their new shelter has 16 large dog cages, 16 medium dog cages, and 16 small dog cages. On Monday, all of the cages are full of dogs.

1.) By the end of the day, only two of the small dogs are left. There are three times as many large dogs as small dogs. How many large dogs are in the shelter at the end of Monday? Show your answer using a multiplication equation.

2.) There are twice as many medium dogs as small dogs left on Monday. How many medium dogs are left? Show your answer using a multiplication equation.

On Tuesday, there are no adoptions at the shelter, so the Friends decide to fill all the empty cages with new dogs. On Wednesday, they have a special sale on large dogs. By the end of the day Wednesday, twelve of the medium dogs remain.

3.) If the number of large dogs adopted was three times as many as the medium dogs, how many large dogs were adopted? Show your answer using a multiplication equation.

4.) If the number of small dogs adopted was four times as many as the medium dogs, how many small dogs were adopted? Show your answer using a multiplication equation.

On Thursday, some dogs arrive at the shelter, and some are adopted.. By the end of the day Thursday, five small dogs, three medium dogs, and four large dogs remain. The shelter realized that the remaining dogs needed their distemper vaccine. Small dogs need 3/10 milliliters , medium dogs need 5/10 milliliters, and large dogs need 7/10 milliliters of the vaccine.

5.) If the remaining dogs in the shelter need the vaccine, how many milliliters does the shelter need to buy? Show your work.

At the end of the day Thursday, the shelter staff realizes that they need to restock the dog food. Each small dog eats ⅓ cup of food and each medium dog eats ⅔ cup of food.

6.) If a large dog eats the same amount of food that two medium dogs eat, how much food does a large dog eat? Show your work.

7.) On Friday afternoon, there are 3 dogs in the small dog room. How much food does the shelter need to measure out to have enough food for every dog in the small dog room? Show your work.

By the end of the day Friday, all of the remaining dogs were adopted.
8.) How many dogs were left in the shelter?

Teacher Page for A Week at the Animal Shelter (4th Grade)

In this activity sheet, students will use scenarios from an animal shelter to practice these standard skills:

(A) Interpret a multiplication equation as a comparison. (Questions 1, 2)

(B) Multiply or divide to solve word problems involving multiplicative comparison. (Questions 3, 4)

(C) Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators. (Questions 5, 6, 7)

Adapted by Virginia Parkman, Kelly Sturner, and Suzanne Lenhart

A Week at the Animal Shelter (5th Grade)

Friends of Campbell County Animals need your help figuring out how many dogs they have passing through the adoption floor in a week. Recall that their new shelter has 16 large dog cages, 16 medium dog cages, and 16 small dog cages. On Monday, all of the shelter's cages are full of dogs. By the end of the day, six small dogs, fourteen medium dogs, and twelve large dogs were left in the shelter. On Tuesday, new dogs arrive. They now have an additional 1⅓ the number of small dogs from Monday, 1/7 of the medium dogs from Monday, and ¼ of the large dogs from Monday added to their respective rooms.

1.) How many dogs are in each room? Show your work.

On Tuesday, no dogs were adopted, so the shelter filled the remaining empty cages with dogs. The shelter needs to restock the food in the dog rooms. Each small dog eats ½ cup of food, each medium dog eats ¾ cup of food, and each large dog eats 1½ cups of food. The shelter needs to measure out enough dog food for each dog room.

2.) How many total cups of food does each room need?

On Wednesday, three small dogs, five medium dogs, and two large dogs were adopted. At the end of the day, the shelter restocks the rooms with food for the remaining dogs.

3.) How many cups of food does each room need now?

On Thursday, none of the dogs were adopted, so the staff fills the empty cages to have all the rooms full. On Friday, four small dogs, three medium dogs, and six large dogs were adopted.

4.) How many large dogs were adopted during the week? Show your work.

5.) Based on the adoptions this week, estimate how many large dogs you would expect to be adopted in a month. Show your work.

6.) How many large dogs would you expect to be adopted in a year? Show your work.

Teachers Page for A Week at the Animal Shelter (5th Grade)

In this activity sheet, students will use scenarios from an animal shelter to practice these standard skills:

(A) Fluently multiply multi-digit whole numbers using the standard algorithm. (Questions 5, 6)
(B) Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. (Questions 1, 3)
(C) Solve real world problems involving multiplication of fractions and mixed numbers. (Questions 1, 2, 3)

Adapted by Virginia Parkman, Kelly Sturner, and Suzanne Lenhart