

# Information for Teachers

- ▶ Suggested grade level: 4<sup>th</sup>
- ▶ Suggested materials: paper, pencil
- ▶ Skills addressed: Whole Number Division
  - ▶ Solves division problems involving quotients with remainders

# Math in Action: Veterinarian

Division  
in Veterinary Science

# Act 1

Noticings and Wonderings


# Bryna, Animal Clinic

Video Link:

<https://msubillings.box.com/s/bxf77sobiq8zwnim7xljf1ze5p17xxtc>

What do you notice?

What do you wonder?



# Why do you think it's important for veterinarians to correctly solve math when it comes to animal health?

- ▶ What would happen if veterinarians did not know their math facts when treating an animal?

# Act 2

Estimating and Solving

# Why is it important for veterinarians to use all the medicine they can and not waste any?

- ▶ When taking medicine, do you take all of the medicine at once, or do you usually have some left over?
- ▶ Why do people save their unused medicines?
- ▶ Would it be expensive to keep buying new medicine for each animal that gets treated?



A family is bringing in puppies that need their rabies vaccinations. You are wondering if you have enough vaccine in order to treat every puppy, or if you need to order more.

# What do you need to know about the puppies you will be treating and the amount of vaccination at the clinic to solve this problem?

Needed information about puppies:

*Share your ideas here:*

Needed information about vaccine:

*Share your ideas here:*

After doing some research before the appointment, here is what you know about the scenario.

- ▶ There is 1,250 ml of vaccine at the clinic
- ▶ In order to vaccinate a puppy, veterinarians need to administer 115 ml per animal
- ▶ There are eight puppies who need their rabies vaccination

# The Veterinarian's Answer...

- ▶ The Veterinarian Technician needs to know if additional vaccine for this upcoming appointment is required. Do you ask them to order more, or can you treat all of the puppies with the remaining amount you have? Explain your reasoning in your answer.

# Act 3

Discuss, Reveal, and Extend

In this scenario, you as the veterinarian did not need to order any additional vaccine as you would have been able to treat all eight puppies.

- ▶ How many total milliliters of vaccine were used to treat all eight puppies?
- ▶ Was there any medicine leftover? Why or why not? How much?
- ▶ With the remaining amount, could any other puppies be vaccinated? How many?

# Skills You Practiced

- ▶ Solves division problems involving quotients with remainders