

## Math Unit Guide (Lower Grades)

from wwww.yukonquest.com (built by Selkirk School grade 7 students )

1. Mushers must put booties on dogs to protect their feet from sharp ice on the trail. It takes a musher about 15 seconds to put one bootie on a dog. How long would it take to put booties on a team of 16 dogs?
2. Bill decides to go on a training run with a small team of four dogs: Smokey, Star, Gertie and Bella. While he is on his run, he wants to stop and give each dog a chance to run in a different position, because he wants to see where each dog performs the best. How many times will he have to stop before each dog has had a chance to run in each of the four positions?
3. Dogs on a team are often related to each other. For instance, on one team, Smokey is the son of Chief, and Razor is the great grandfather of Junior. Junior is the grandson of Chief. Put the four dogs in order from the youngest to the oldest.
4. Sandy bought four "iron rope" necklines (the kind that dogs are not supposed to be able to chew through.) They are $\$ 3.95$ each. The dogs immediately chewed through three of them. How many necklines are left?
5. An outstanding lead dog has a problem - she eats rocks. This can cause quite a medical problem, so her musher built a square wooden platform for her to live on. One side is 10 feet long. How many square feet are there in the platform? (Hint: Draw a picture)
6. Dave has 36 dogs in his kennel. One half of his dogs are black, one sixth of the dogs are mostly white, and the rest are brown. How many brown dogs does he have? (Hint: Draw a picture.)
7. Sarka wanted to train her dogs on a clear, starry night. Because of a weather condition known as an "inversion", the colder air was settled in lower areas, and it was warmer at higher elevations. It was -44 degrees Fahrenheit on her favorite trail in the Tanana flats. She decided to use the trails in Two Rivers, because it was only -6 F there. How many degrees warmer was it in Two Rivers?
8. After Sarka worked with her dogs on the trail, she stopped at Tack's for some coffee, an omelet, and a cinnamon roll. The coffee was $\$ .75$ a cup, the omelet was $\$ 4.95$, and the cinnamon roll was $\$ 2.95$. Sarka made sure she tipped the waitress $15 \%$. What was the cost of the food? (Bonus - How much was the tip?)
9. Bill and Sandy have 28 sled dogs in their kennel. Each dog gets a half pound of dog food a day. One bag of dog food weighs 40 pounds. About how many days will one bag of dog food last? Explain your answer.
10. It's about 100 miles from Dawson to Stewart River. Your team is traveling at 10 miles an hour. After traveling 50 miles, you stop and rest your dogs for 5 hours. Then you continue all the way to Stewart River. How many hours would it take you to get from Dawson to Stewart River?
