

# Wolf Math

Multiplication and Division  
Lupine Story Problems



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Hello Teachers,

Thank you for downloading this handout. After decades of teaching, now I am sharing some of the activities I designed for my students and some new ones as well.

Please, check out the self-paced teacher education courses on UnCommon-Core.com.

While you are there, sign up for your free copy of **Colorful Collections: A Mindful Exploration of Proper Fractions**.

Also, visit my Teachers Pay Teachers store UnCommon-Core dot com.

Thank you again. All the best,



Isabelle

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## Teacher Tips Preparation

This PDF is the free  
for now sample.

Let me know if you would like the  
complete set when it's ready.  
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Have extra recycling boxes  
handy, there will be lots of  
paper scraps.

This work addresses  
CCSS 3.OA.3 multiply  
and divide within 100.

Print the scratch paper on one side only. There  
are three versions of the scratch paper. Even  
better, grab scratch paper from recycling.

Print pages 11 & 12 back to back. Make a test  
copy first, then make class copies once you  
are sure that they will print correctly.

To avoid confusion, practice making the Wolf Math  
booklet before class. If your students will be adding  
pages to the booklet, practice that as well.

Print a couple copies of the task cards if you  
want the entire class working on Wolf Math at  
the same time. Use heavy paper if possible.

You may want to plan some mental math questions to  
use when introducing Wolf Math. "How many ~ paws on  
3 wolves? Ears on 12 wolves? Tails on 100 wolves?"

Laminate to save for future use.

You might copy the Wolf Facts page back to back with  
the Wolf Stats page. This way students will have some  
ideas when thinking of how they are like wolves.

Most of the resources are for adult audiences.  
Sort and simplify the information you think would  
benefit your students as needed.

You might also search for origami wolf models or  
instructions on how to draw wolves.

I tried to find the length of a wolf snout. I thought it  
would make a fantastic stat. Students would enjoy  
comparing the length of their nose to that of a wolf!

If your class isn't able to measure some wolf snouts,  
they could substitute the length of a husky's nose.



## Teacher Tips In the Classroom

Let students in need of support work with others.

Let students do calculations on the scratch paper, then write the answer neatly in their book.

**Just Math:** Print the answer booklet and the task cards. When students have answered all eight questions, check as a whole class or in small groups.

There are blank task cards for you to fill out. Use facts you want your students to practice.

Alternatively, challenge your students to create some task cards ~ along with an answer key, of course!

Why not? Invite your students to rewrite and solve the problems in metric measurements, too?

Let early finishers rewrite multiplication problems as division problems and vice versa?

Research and list the types of prey that wolves hunt.

**Math, Reading, and Science:** Find lupine resources for your students to study while they work on these math problems.

When information from different sources conflicts (as it will) have a class discussion to figure out what is going on. This gives students insights into how scientists collect data and make estimations.

Have pairs of students find and share an interesting wolf fact. Ask how scientists might have done research to verify that fact. (I'm especially interested in who was brave enough to measure wolf fangs!)

Add pages to the Wolf Math booklet: fold blank pages diagonally, trace the booklet, and cut around the edge. Line up the center folds, use a long arm stapler to finish.

Your students might benefit from completing the Wolf Stats/My Stats page. You might want to list specific wolf stats before making class copies or you may decide to let your students choose the stats they want to use for comparison. Some students might not want to share their weight, or other specific information.



1. A wolf ate five pounds of meat every day.

How much did it eat in 1 week?

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2. Six pups were playing outside their den. Each of them had nine burrs in their fur.

How many burrs were there in total?

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3. There was a litter of pups that weighed six pounds all together. Each pup weighed one pound.

How many pups were in the litter?

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4. A wolf pack traveled 40 miles in one day. They trotted at a speed of five miles every hour.

How long was their trip?

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5. Wolves have forty-two teeth.  
Humans have thirty-two teeth.

How many more teeth does a wolf have than a human?



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6. A wolf pack trotted five miles every hour. They traveled six hours in one day.

How far did they travel?



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7. One spring, a wolf pack had three litters of pups. Each litter had four pups.

How many pups were born that spring?



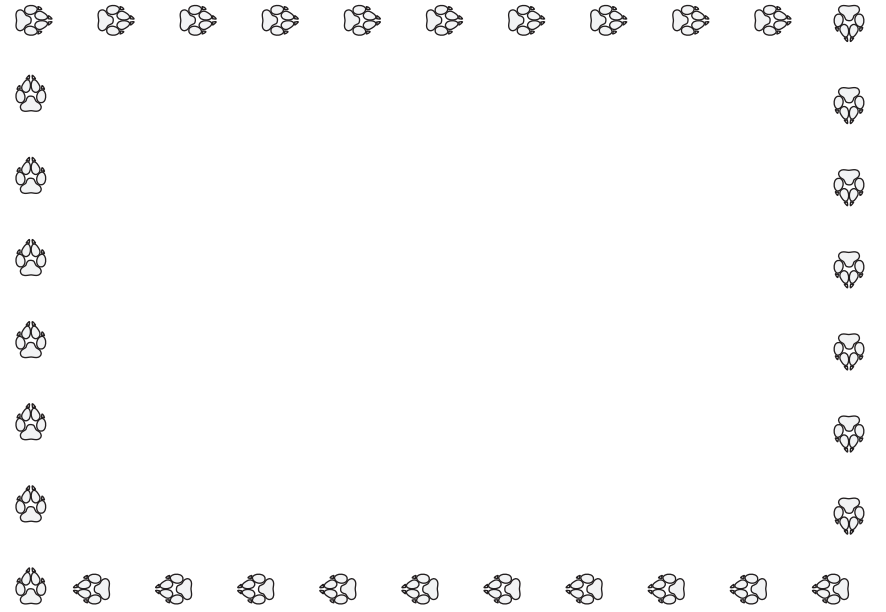
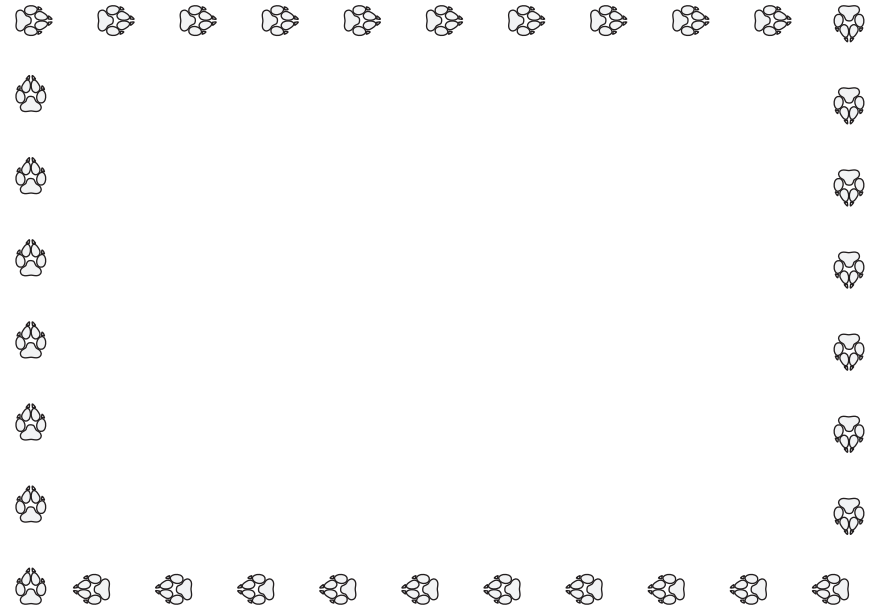
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8. One wolf stands 26 inches high at its shoulder. A second wolf stands six inches higher at the shoulder.

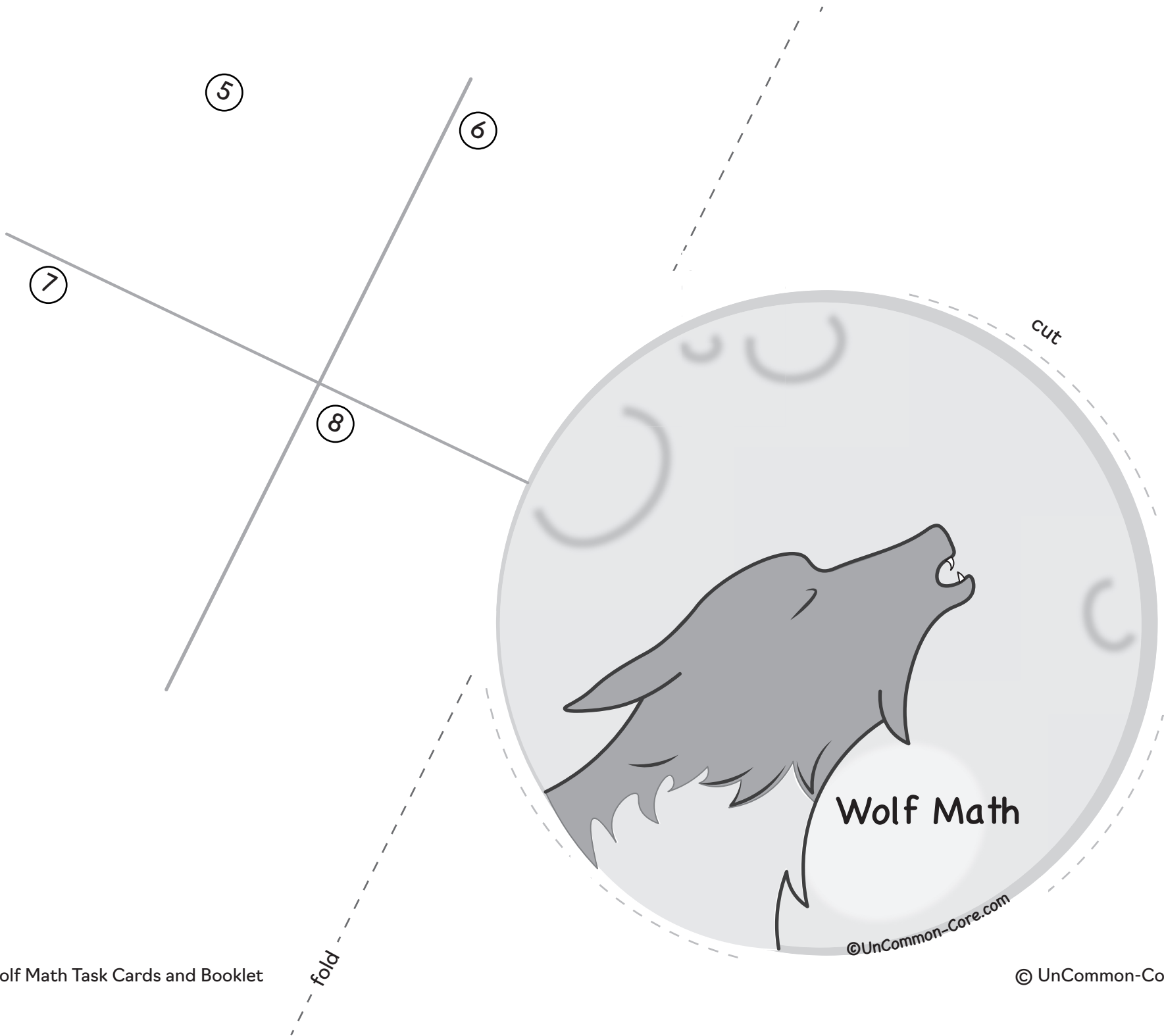
How tall is the second wolf?

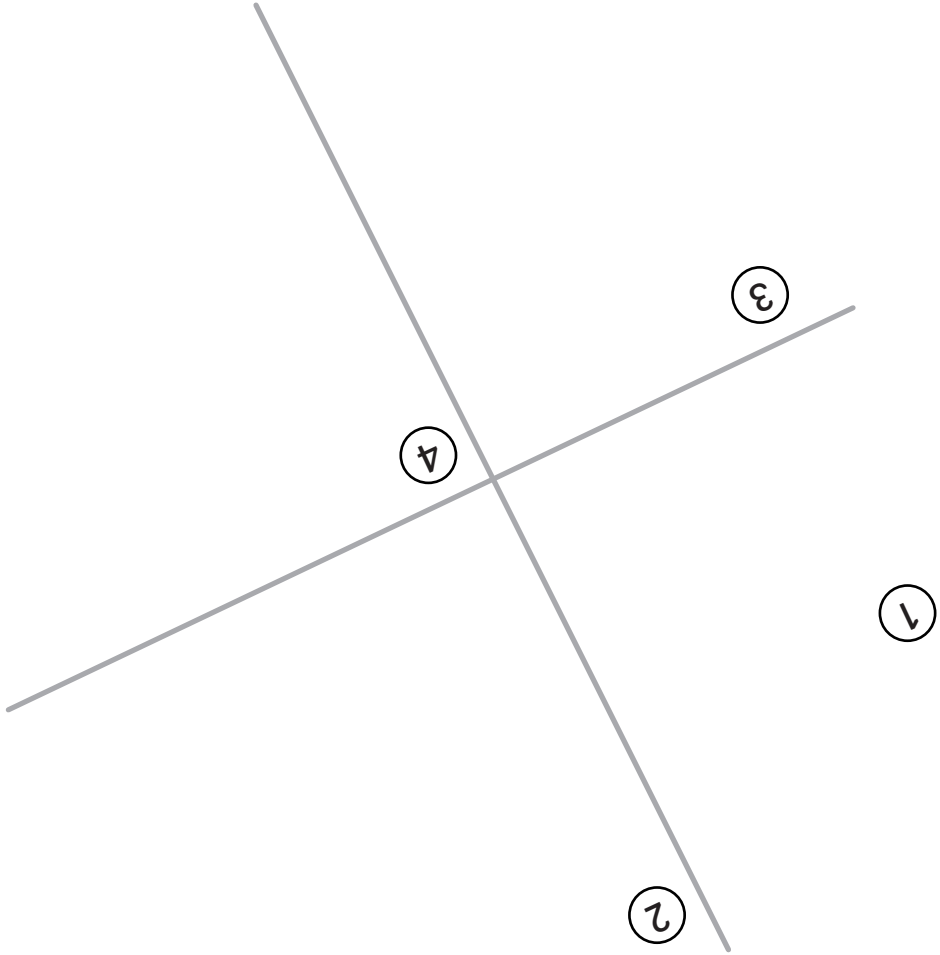












Wolves do not howl at the moon. They howl at each other. They howl to be social, to help lost wolves find their way home, or just to say, "We are here and we like to howl!"

Wolves howl anytime they feel like it ~ day or night.

What's wrong with the cover?



## Scratch Paper

Wolves recognize each other by scent. Presuming your teacher is not a wolf, please write your name on your Wolf Math booklet.



## Scratch Paper

Wolves mark their stuff with their unique scent. Presuming you are not a wolf, please mark your Wolf Math booklet with your name.



## Scratch Paper

Wolves scratch the ground before sleeping to make a comfortable and safe bed. Humans use scratch paper to solve math problems before writing them neatly in their Wolf Math booklets.



## Wolf Facts

Female wolves have a litter of 4 to 6 pups every spring.

Wolves have 42 teeth. Their fangs can reach 2.5 inches long!

Wolves can hear howls as far as 6 to 7 miles away!

Eyes in front?  
Likes to hunt ~  
Eyes to the side?  
Run and hide!

Female gray wolves weigh between 50 and 85 pounds. From the tip of its nose to the tip of its tail they measure between 4.5 to 6 feet long!

A typical gray wolf pack has between 6 to 10 individual wolves. However, some packs can have more than 25 wolves. A pack is a family. The leaders, the alphas, are the parents.

Male gray wolves weigh between 70 and 110 pounds. They measure between 5 and 6.5 feet long from tip of their snout to tip of their tails. They stand between 26 to 32 inches high at the shoulder.

Wolf pups weigh about one pound when they are born. They are born with their eyes closed. When they are about two weeks old, their eyes will open. A week later they will begin to explore the world outside their den. At six months old they are nearly as tall as their parents!

Wolf tracks vary depending on the size of the individual. Typically, a gray wolf track measures 4.5 inches tall by 3.5 inches wide. Wolves walk on their tip toes ~ so their tracks do not show their entire foot ~ just their toes!

Gray wolves need to eat about 3 to 7 pounds of meat daily in order stay healthy. Sometimes they eat a lot at once to keep them going for the next few days. A wolf never knows when its next meal is coming, so they hide food around their territory to make sure they will survive.

A pack's territory can be as small as 50 square miles if that area has lots of prey. If there isn't as much prey the pack's territory could be 300 square miles or larger.

Wolves can trot about 5 miles per hour. When they chase their dinner, they can speed up. Their fastest speed is between 36 and 38 miles per hour. Wolves have to travel long distances to find food. Sometimes they travel more than 50 miles per day.





## Wolf Stats



## My Stats



## Answer Key

1. The wolf ate 35 pounds in a week.

Multiply

2. There were 54 burrs on the pups.

Multiply

3. There were 6 pups in the litter.

Divide

4. The trip was 8 hours long.

Divide

5. Wolves have ten more teeth than humans.

Subtract

6. The pack traveled 30 miles.

Multiply

7. Twelve pups were born that spring.

Multiply

8. The second wolf is 32 inches tall at the shoulder.

Add



Links to  
Wolf Resources



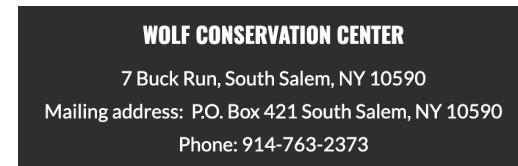
### ANIMAL CORNER

Discover the many amazing animals that live on our planet.



BIG SKY STORIES

## Interesting Facts About Wolves



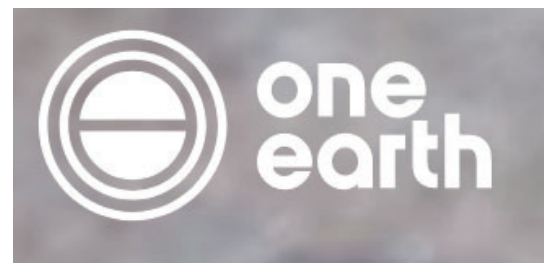
PBS Shows Explore



euRONATUR STIFTUNG

WHAT WE DO > BEAR, WOLF, LYNX > WOLVES IN EUROPE > PROFILE: WOLF

Profile: Wolf



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