



# *Nature* **MATH**

Junior Multiplication and Division



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# Nature MATH

## Naturalist Supplies

In order to get ready for your outdoor adventures this spring, it's shopping time! Use the prices of each item that is given to figure out the total cost of your bill below.



**Binoculars**

Two Pairs for \$22



**Pass for**

**Conservation Areas**

\$6 per day  
\$50 for unlimited days



**Field Guide**

\$12 per guide



**Magnifying Glass**

\$4



**Camera**

\$70



**New Hiking Boots**

\$20 per boot



**Trail Mix**

\$4 per bag

Item	Price
1 pair of new Hiking Boots	
3 Field Guides	
1 pair of Binoculars	
2 Magnifying Glasses	
5 Bags of Trail Mix	
10 Days of Conservation Area Pass	
1 Camera	
<b>Total Cost</b>	



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# Nature MATH

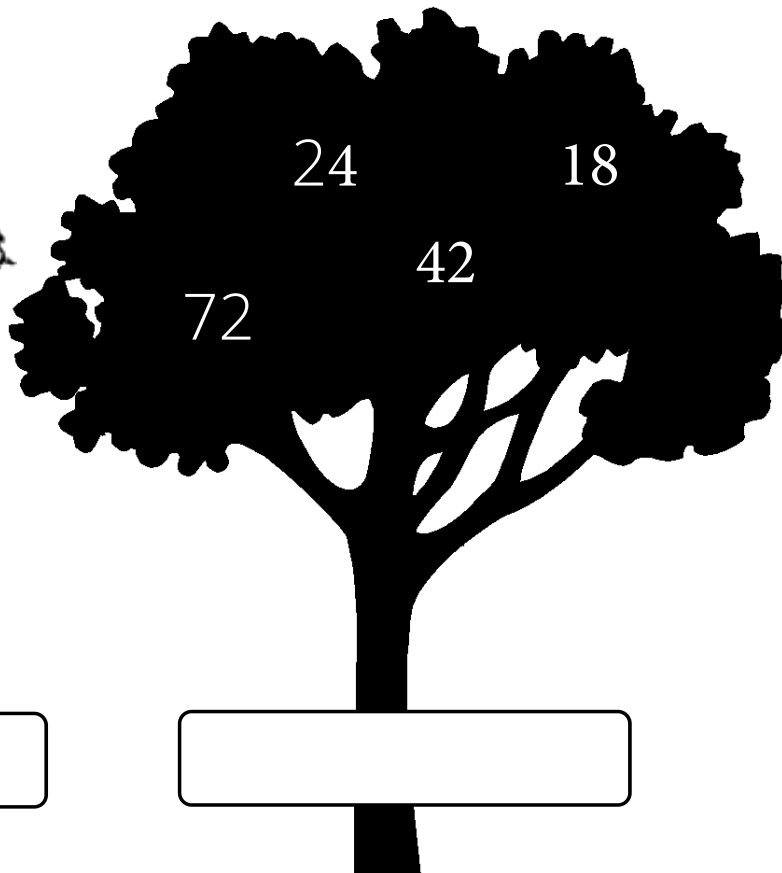
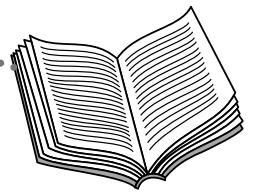
## TREEmendous Math!

Trees are everywhere around you when you hike in the forest. There are many different types of trees. Use the clue in your field guide, along with the numbers in the trees to figure out which tree is which species.

Multiples of 3 = White Pine

Multiples of 9 = Balsam Fir

Multiples of 6 = Red Oak



# Nature MATH

## Poison Ivy Path

Uh oh! You've come across a large field with a lot of patches of poison ivy. The trouble is your backpack with your snacks are on the other side! Solve the multiplication and division problems to determine which squares are safe to travel through. Mark any unsafe squares with an X.

**Safe Squares:** = 3, 4, 6, 8, 9, 45

**Unsafe Squares:** everything else!



Start

$8 \times 4$	$12 \times 2$	$63 \div 7$	$7 \times 3$	$24 \div 12$
$9 \times 9$	$56 \div 7$	$4 \times 4$	$8 \times 5$	$3 \times 6$
$10 \times 10$	$16 \div 4$	$7 \times 7$	$3 \times 11$	$8 \times 0$
$5 \times 2$	$42 \div 7$	$30 \div 10$	$9 \times 5$	$49 \div 7$
$1 \times 12$	$5 \times 5$	$51 - 31$	$27 \div 3$	$55 \div 11$



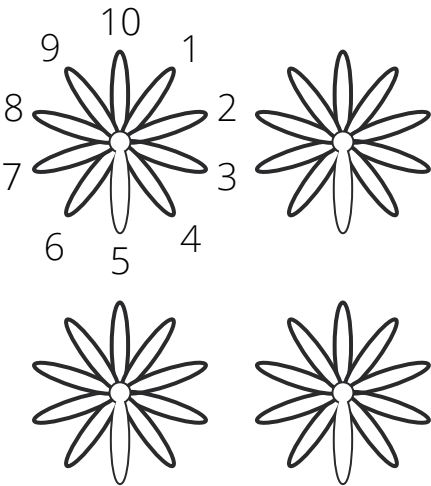
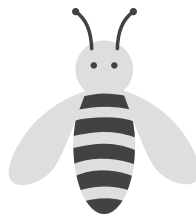
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# Nature MATH

## Pollination Nation!

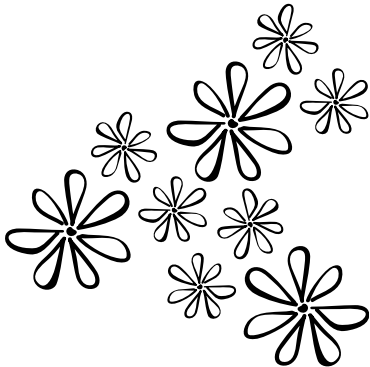
Bees are important pollinators that help many plants to produce their seeds. Your challenge today is to help Alex the bee pollinate the flowers. Alex will pollinate the patches of flowers once you figure out how many petals in total each patch has.

*Hint: rather than counting each petal, try to use your multiplication skills!*

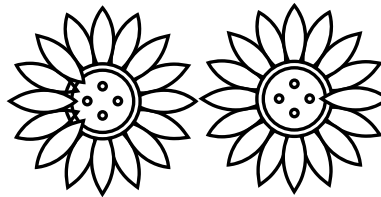


$$\underline{4} \times \underline{10} = \underline{\quad}$$

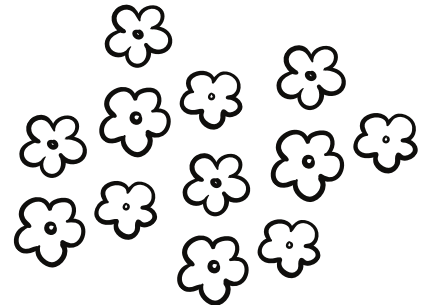
Number of  
Flowers      Number of  
Petals on  
Each  
Flower



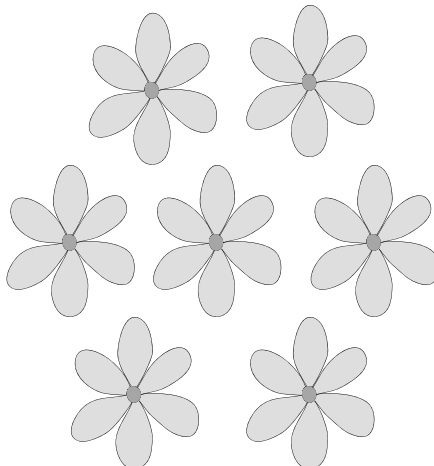
$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



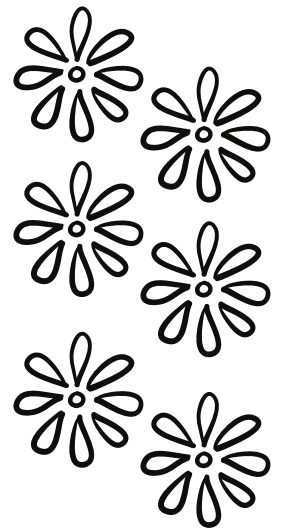
$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



$$\underline{\quad} \times \underline{\quad} = \underline{\quad}$$



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# Nature MATH

## Wetland Wonders

You've come across an amazing wetland. You can't see them, but you can HEAR many different animals all around you. Use the code from your field guide to learn what animals are making all the different noises and calls.



3 = Spring Peeper



32 = American Toad



63 = American Bullfrog



6 = Green Frog



9 = American Bittern



48 = Red winged  
blackbird



**\*long loud  
musical trill\***  
 $8 \times 4$

**jug-o rummm!**  
 $9 \times 7$

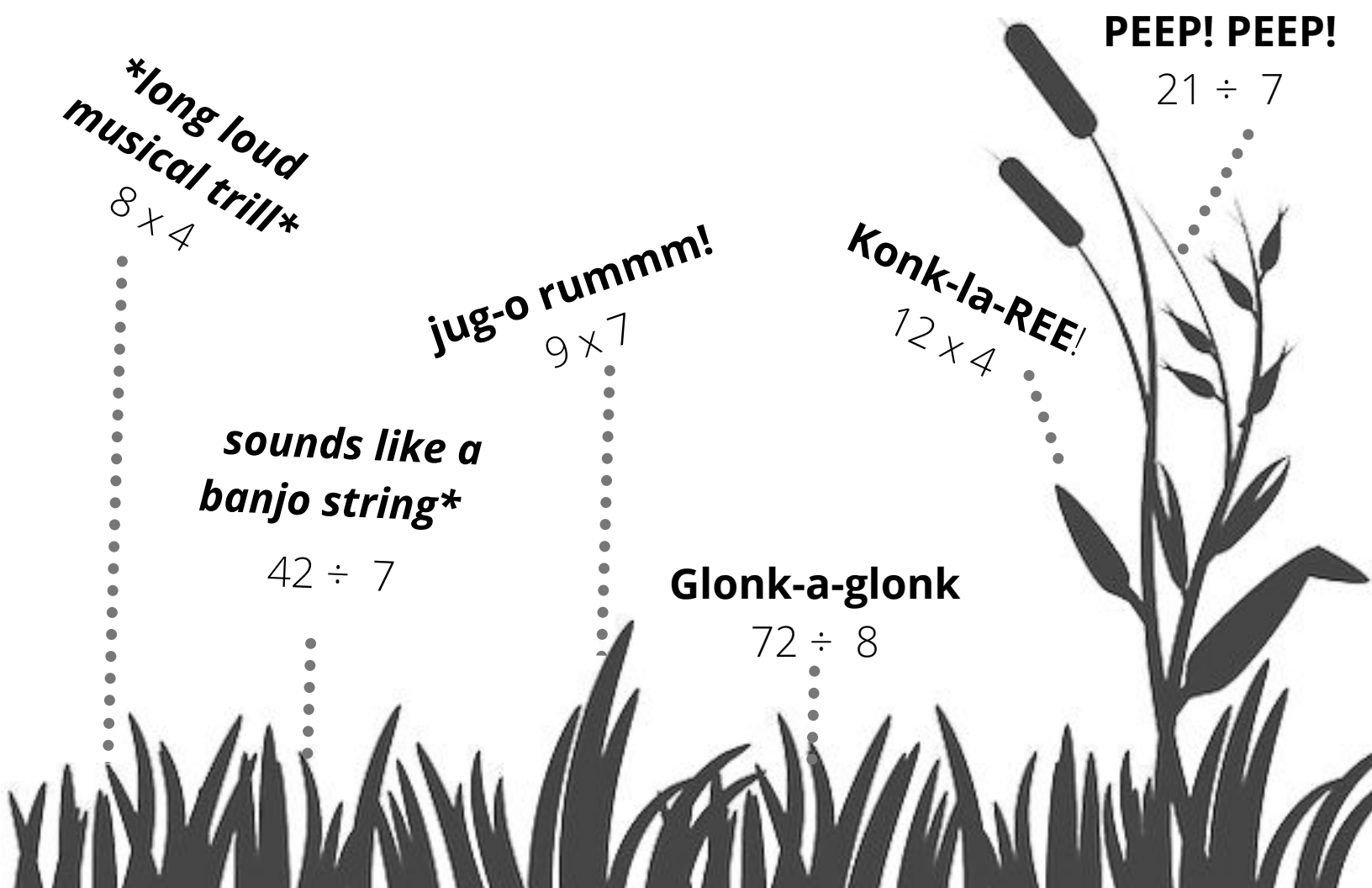
**sounds like a  
banjo string\***  
 $42 \div 7$

**Glonk-a-glonk**  
 $72 \div 8$

**Konk-la-REE!**  
 $12 \times 4$

**PEEP! PEEP!**

$21 \div 7$

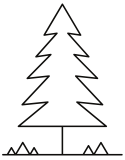


# Nature MATH

## Math in Nature

Math is everywhere in Nature. Many things in nature come in groups. Use your knowledge of multiplication or division to answer the questions below.

### Answer



White pine needles come in bundles of 5. How many needles would be on branch that has 10 bundles?



Dragonflies have 2 pairs of wings. How many wings do they have in total?



Male deers, called Bucks, grow 2 antlers each year. The stronger the buck is, the more points he will have on his antlers. If this buck has 7 points on each antler, how many points in total does he have?



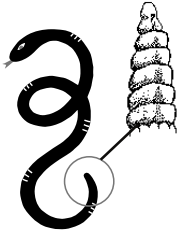
This is called a Scute

Turtle shells are made up of scales called scutes. If a turtle shell had 13 scutes, and there are 2 spots on each scute, how many spots does the turtle have?



# Nature MATH

## Math in Nature



Rattlesnakes gain a new segment on their rattle each time they shed their skin. They shed their skin about 4 times a year. How old would a snake that has 12 segments on its rattle be?



Maple syrup comes from boiling down maple sap. It takes 40 litres of sap to make 1 litre of maple syrup. How many litres of sap would you need to make 2 litres of maple syrup?



Jumping spiders can jump 12 times their own body length. If a jumping spider was 8mm long, how many mm could it jump?



Poison ivy leaves come in bundles of 3. If this plant has 4 bundles, how many leaves does it have?





# Nature MATH

## Who's that bird?

While walking in the forest at Scanlon Creek you see a spectacular bird. It is making a beautiful call. Crack the code to reveal what species of bird you've spotted.

A: 36  
B: 25  
C: 9  
D: 72  
E: 30  
F: 54  
G: 100

H: 66  
I: 16  
J: 95  
K: 4  
L: 64  
M: 48  
N: 45

O: 27  
P: 40  
Q: 81  
R: 1  
S: 10  
T: 36  
U: 90

V: 15  
W: 144  
X: 49  
Y: 7  
Z: 12

$$\begin{array}{r} \hline 5 \times 5 \end{array} \quad \begin{array}{r} \hline 8 \times 8 \end{array} \quad \begin{array}{r} \hline 9 \times 4 \end{array} \quad \begin{array}{r} \hline 81 \div 9 \end{array} \quad \begin{array}{r} \hline 28 \div 7 \end{array}$$

$$\begin{array}{r} \hline 18 \div 2 \end{array} \quad \begin{array}{r} \hline 3 \times 12 \end{array} \quad \begin{array}{r} \hline 4 \times 10 \end{array} \quad \begin{array}{r} \hline 8 \times 5 \end{array} \quad \begin{array}{r} \hline 90 \div 3 \end{array} \quad \begin{array}{r} \hline 9 \times 8 \end{array}$$

$$\begin{array}{r} \hline 18 \div 2 \end{array} \quad \begin{array}{r} \hline 6 \times 11 \end{array} \quad \begin{array}{r} \hline 4 \times 4 \end{array} \quad \begin{array}{r} \hline 9 \times 1 \end{array} \quad \begin{array}{r} \hline 12 \div 3 \end{array} \quad \begin{array}{r} \hline 6 \times 6 \end{array} \quad \begin{array}{r} \hline 72 \times 1 \end{array} \quad \begin{array}{r} \hline 15 \times 2 \end{array} \quad \begin{array}{r} \hline 5 \times 6 \end{array}$$



# Nature MATH

## Plankton Lake!

If you took a droplet of water from Lake Simcoe, and looked at it under a microscope, you'd see many small living creatures called plankton. Plankton are an important part of the food chain in the lake. Solve the multiplication problems below to reveal how many plankton each fish ate!

$8 \times 4$

$12 \times 4$

$3 \times 9$

$11 \times 12$

$9 \times 7$

To learn more about plankton, check out [this video!](#)

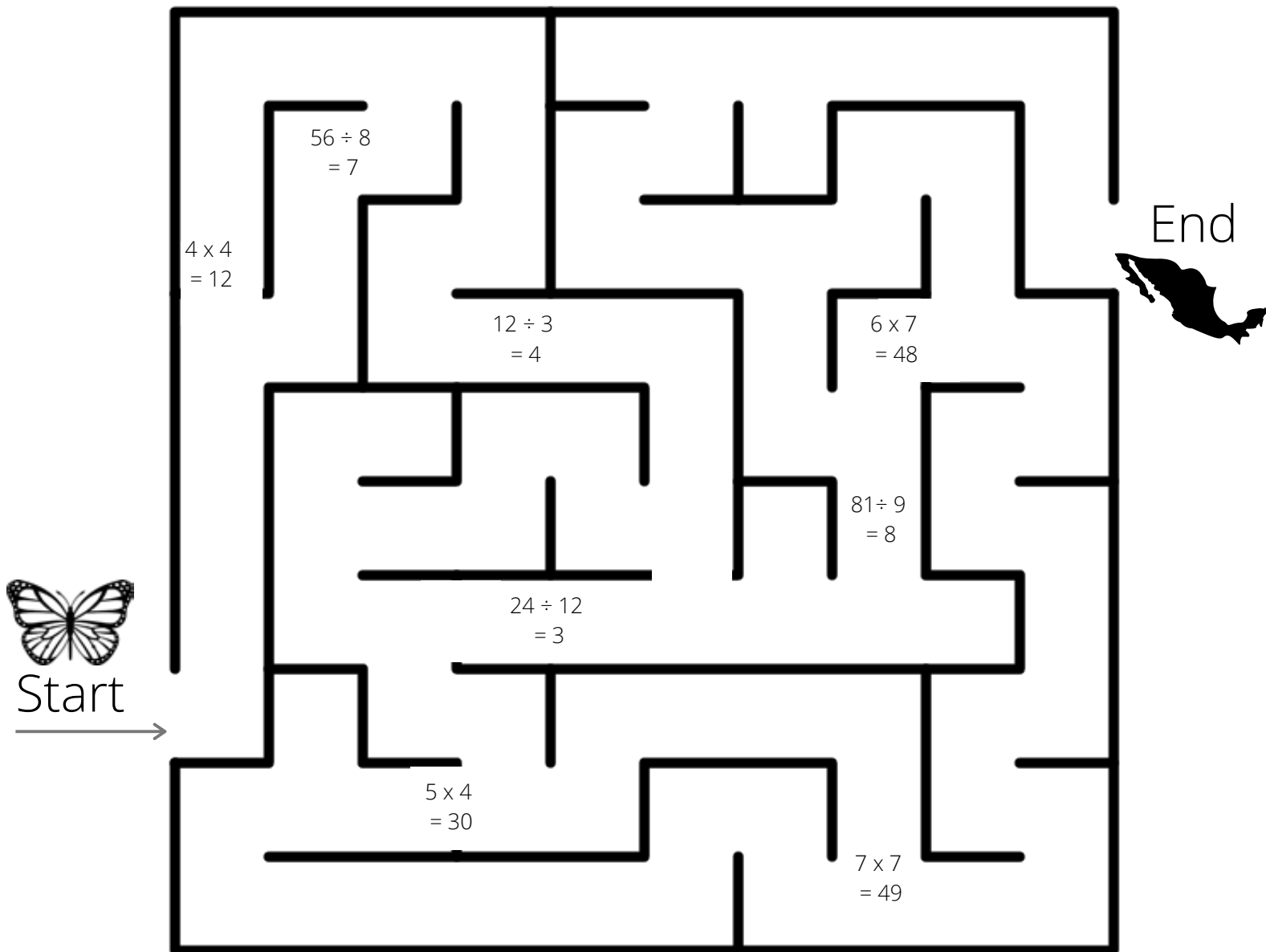


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## Monarch Migration

Every year, Monarch butterflies migrate all the way from the Lake Simcoe watershed south to Mexico where they hibernate for winter. It is an incredible journey. Your challenge is to help the monarch butterfly find the safe path to its hibernation site in Mexico. The safe path will only have **correct** multiplication or division problems.



# Nature MATH

We hope you enjoyed this resource! For more resources to support distance learning visit:

<https://www.lsrca.on.ca/education/online-learning>.

or join our facebook group  
"Outdoor Learning with  
LSRCA"



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