

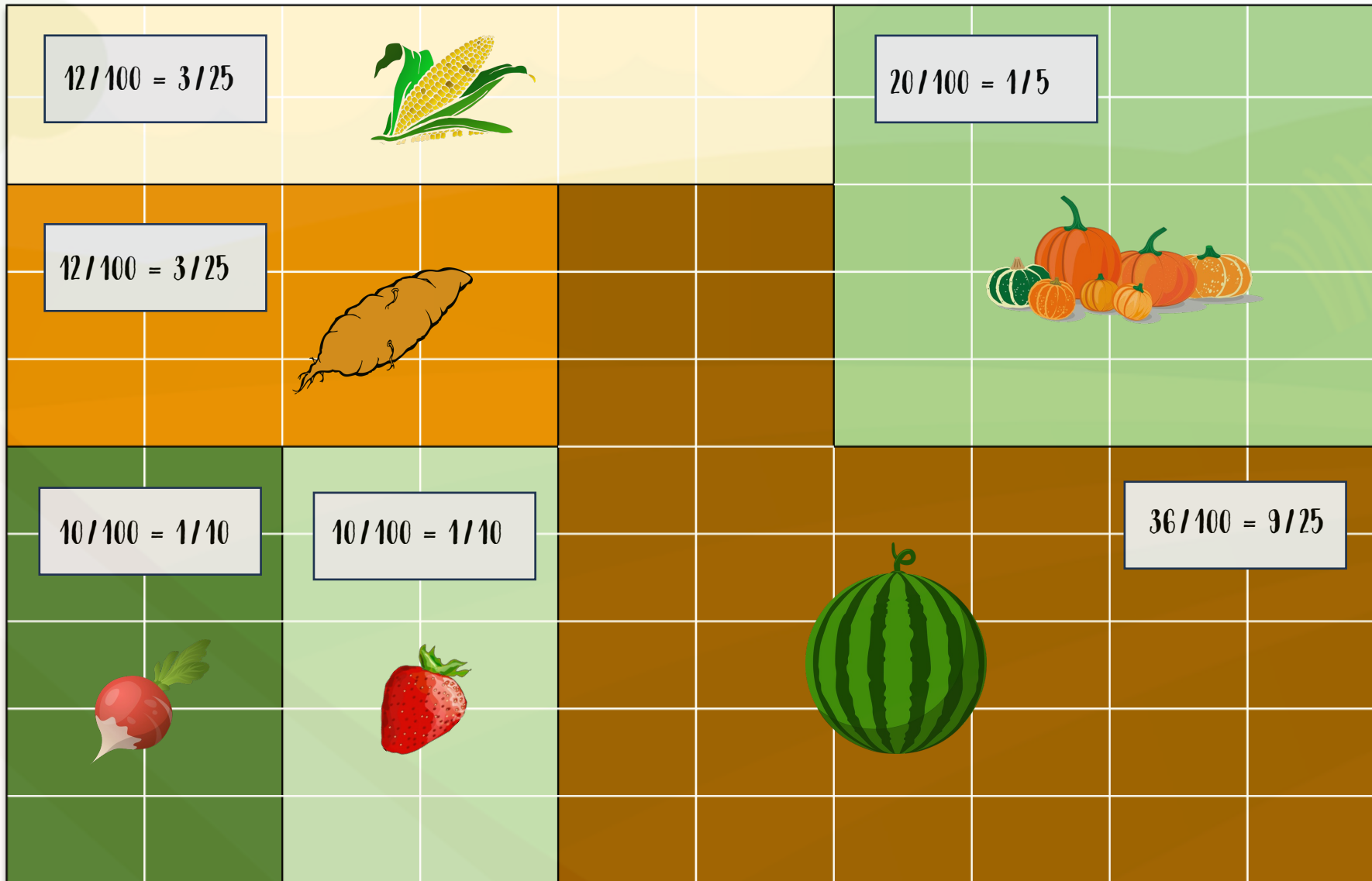
FRACTION FARMING



AN INQUIRY INTO MULTIPLYING AND DIVIDING
FRACTIONS



THE
Math Dogs



YOUR FARM SHOULD HAVE:

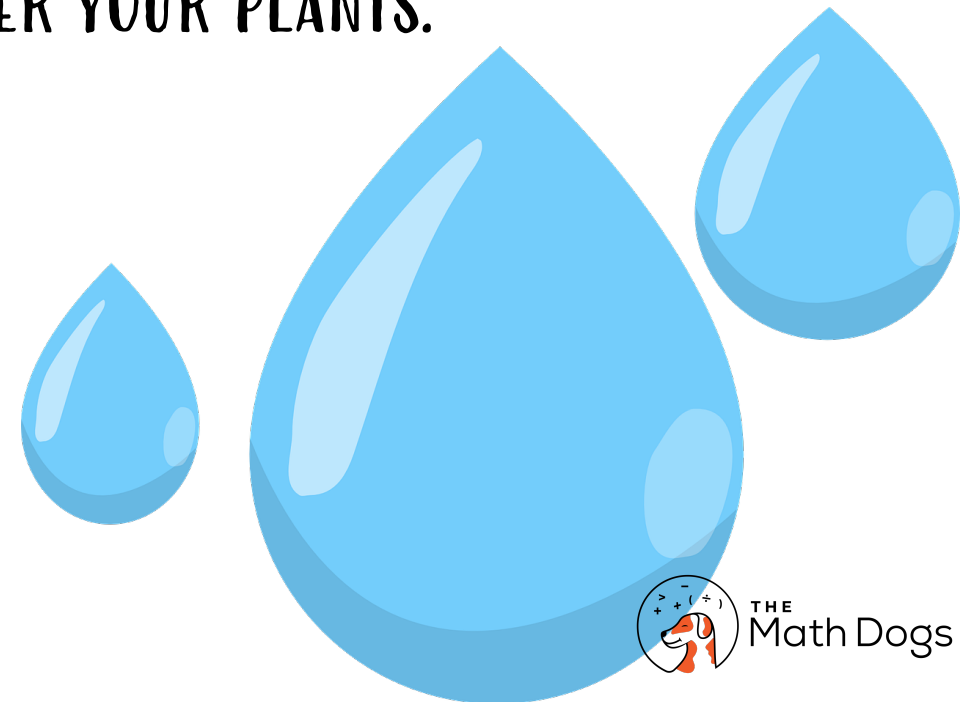
- 3 ROOT VEGETABLES
- 1 FRUIT
- 1 WHEAT / CORN
- 1 VEGETABLE

Take a look at our example farm on the left! Then, create your own and don't forget to simplify!



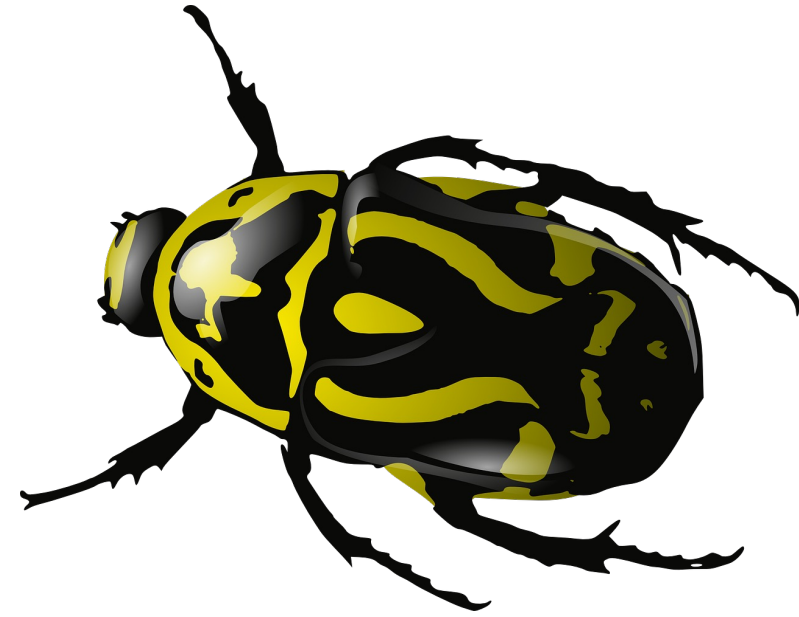
WATER, WATER, WATER!

- YOUR CROPS NEED WATER TO GROW AND FLOURISH. TOO MUCH WATER, AND YOUR PLANTS WILL.... TOO LITTLE WATER....
- FOR EVERY SQUARE METER, YOU 'LL NEED TO WATER YOUR PLANTS:
 - ROOT VEGETABLES ($4/5$ GALLON PER SQUARE METER)
 - WHEAT / CORN ($3/4$ GALLON PER SQUARE METER)
 - FRUITS ($2/3$ GALLON PER SQUARE METER)
 - VEGETABLES ($1/4$ GALLON PER SQUARE METER)



PESTS!!!

OH NO! YOUR FARM HAS BEEN AFFECTED BY SOME PESTY PESTS. $\frac{1}{3}$ OF YOUR CROPS HAVE BEEN WIPED OUT! CALCULATE THE NUMBER OF SQUARE METERS FOR EACH CROP THAT HAS BEEN AFFECTED!



EXAMPLE: YOUR PUMPKINS REPRESENT 20 SQUARE METERS OF YOUR FARM.

$$20 \times \frac{1}{3} = \frac{20}{1} \times \frac{1}{3} = \frac{20}{3} \text{ AS A MIXED NUMBER } 6 \frac{2}{3}$$

SO... $6 \frac{2}{3}$ SQUARE METERS OF YOUR PUMPKIN PATCH IS NOW GONE!!!

LOOKING AHEAD

Each year you keep a fraction of your crops- you use that for seeds needed for the following year's crops. Then, you divide the remaining fraction of crops amongst friends.

For the example above, you'll need to divide $\frac{3}{4}$ (fraction left for your friends) by 4 (number of friends you are sharing with)

$$\frac{3}{4} \div \frac{4}{1} = \frac{3}{4} \times \frac{1}{4} = \frac{3}{16}$$

Year	Fraction of crops saved	Fraction of crops given to your friends	Number of friends receiving crops	Fraction given to each friend
2023	1/4	3/4	4	
2024				
2025				
2026				
2027				
2028				

