FUN FACES OF WISCONSIN AGRICULTURE

## MATH - CHRISTMAS TREE LESSON PLAN



## STUDENT'S NAME:

Answer the questions below. Show your work.

1. Your Christmas tree farm has 250 trees and your aunt is growing 125 trees on her farm. How many trees will you have altogether?
2. A White pine tree has needles in groups of five. If there are 20 groups of needles on one branch, how many needles are there?
3. The average Christmas tree is harvested at 7 years. The first tree is planted when you were born. If one tree must be harvested before another tree is planted and you are 11 years old, how many Christmas trees have been grown and harvested in your lifetime?
4. In Wisconsin, there are 1,387 Christmas tree farms. If each of those Christmas tree farms grew 50 trees to be harvested each year, how many homes could have real Wisconsin Christmas trees for Christmas this year?
5. If one tree can be used to make 3 wreaths, how many trees would you need to make 540,000 wreaths?
6. Using a compass and protractor, create a pie graph to show the following Christmas Tree Farm information (be sure to label your graph):
$39 \%$ of farms are less than 10 acres
24\% of farms are 10-19 acres
$24 \%$ of farms are 20-49 acres
$13 \%$ of farms are more than 50 acres
7. Using the information from the above problem, If there are 1,387 Christmas tree farms, approximately how many of each size are there?

## ANSWER KEY

1. Your Christmas tree farm has 250 trees and your aunt is growing 125 trees on her farm. How many trees will you have altogether?

$$
250+125=375 \text { trees }
$$

2. A White pine tree has needles in groups of five. If there are 20 groups of needles on one branch, how many needles are there?

$$
5 \times 20=100 \text { needles on one branch }
$$

3. The average Christmas tree is harvested at 7 years. The first tree is planted when you were born. If one tree must be harvested before another tree is planted and you are 11 years old, how many Christmas trees have been grown and harvested in your lifetime?

Only one tree. A second one has been planted, but has not been harvested
4. In Wisconsin, there are 1,387 Christmas tree farms. If each of those Christmas tree farms grew 50 trees to be harvested each year, how many homes could have real Wisconsin Christmas trees for Christmas this year?

1,387 Farms $X 50$ trees on each farm $=69,350$ real Wisconsin Christmas trees
5. If one tree can be used to make 3 wreaths, how many trees would you need to make 540,000 wreaths?

$$
540,000 / 3=180,000 \text { trees }
$$

6. Using a compass and protractor create a pie graph to show the following Christmas Tree Farm information (be sure to label your graph):
$39 \%$ of farms are less than 10 acres
$24 \%$ of farms are 10-19 acres
$24 \%$ of farms are 20-49 acres
$13 \%$ of farms are more than 50 acres

# Size of Wisconsin Christmas Tree Farms 


7. Using the information from the above problem; If there are 1,387 Christmas tree farms, approximately how many of each size are there?
$1387 \times$. 39=541 farms with less than 10 acres
1387 X .24=333 farms with 10-19 acres
1387 X .24=333 farms with 20-49 acres
1387 X .13=180 farms with more than 50 acres

