

## KITCHEN: AG POWER AND EQUIPMENT

I will be able to calculate volume and area.

I will be able to use and convert between inches, feet, yards as long as I know the conversion factor. \_\_\_\_\_.

## CONCRETE AND PLUMBING

Pretest tells me:

- We cannot find cubic feet.
  - We cannot work with inches and feet.
  - We do not know how to find the area of a circle.
- We cannot add 10% for waste
  - Multiply by 1.10
  - Read directions?

## CLASSROOM:

Compare Feet, square feet, cubic feet.

Inches, square inches, cubic inches.

Examples:

1) Length of fencing needed for a sing strand of wire around a garden that is 30' X 40'

2) Area of a wall 8' X 10'

3) Area of a building site 42' X 35'

4) Volume of a rectangular water tank 3' X 2' X 6'

5)Area of a floor 8' 6" X 14' 2"

8 feet + 6/12 feet X 14 feet + 2/12 feet

8.5 X 14.16

## FLOOR TIME:

GET:

- 1) A PARTNER
- 2) A TAPE MEASURE
- 3) GET ON THE FLOOR.

How many inches in 1 ft?

Use the tape measure to mark off a 12" by 12" square.

How many 1" squares can fit into that? So, how many square inches in a square foot?

Now think volume. Use the tape to mark 12" high. How many rows of 1" blocks would fit?

How many 1" blocks fit in your 12" X 12" X 12" space? How many cubic inches in 1 cubic ft?

## Shop TIME:

Each group grab a group. Groups of 4.

How many feet in a yard?

Use the tape measures to mark a space 3' by 3'. How many square feet in 1 square yard?

Use another tape to mark the 3' high mark. How many cubic feet in 1 cubic yard?

## Last TIME:

Measure the diameter of any circle: \_\_\_\_\_

Wrap the tape around the outside circumference. What is the circumference: \_\_\_\_\_

What is Circumference divided by Diameter: \_\_\_\_\_

Circumference of a circle:  $\text{diameter} \times \pi$  or  $2r \times \pi$

Area of a circle:  $\pi \times r \times r$

**back to the classroom!**