

Name \_\_\_\_\_

WS Dimensional Analysis

Length

1 nautical mile = 6076.1 feet  
1 league = 5 280 yards  
1 cable = 120 fathoms  
1 fathom = 6 feet  
1 degree = 69.047 miles  
1 mile = 5280 feet  
1 hand = 4 inches  
3 feet = 1 yard  
1 mile = 1.61 kilometers  
1 meter = 3.28 feet

Mass

1 gram = 15.432 grains

Area

1 township = 36 square miles

Volume

4 gills = 1 pint  
2 pints = 1 quart  
1 liter = 1.0567 quarts  
1 bushel = 4 pecks = 32 quarts  
1 gallon = 4 quarts

1. How many seconds old are you?
2. A person's weight is 154 pounds. Convert this to kilograms. (1 lbs. = 0.454 kilograms)
3. An aspirin tablet contains 325 mg of acetaminophen. How many grains is this equivalent to?
4. Your cruise ship is leaving for a 610-league adventure. How many nautical miles is this?
5. Later the ship is discovered at 38 fathoms deep under water. Convert this to meters.
6. Fortunately you survived! You are stranded on a deserted island that is located 12.5 degrees north of the equator. How many kilometers is this?

7. If you are rationed to 32 gills of fresh water a day. How many liters is this?
  
  
  
  
  
  
  
  
  
  
8. The island has an area of 3.5 townships. How many square yards is this? (Please use scientific notation.)
  
  
  
  
  
  
  
  
  
  
9. To reach the top of a palm tree for a coconut you will have to climb 7.4 meters. How many hands is this?
  
  
  
  
  
  
  
  
  
  
10. The island is rich with hot chili peppers. You can collect 1.6 pecks a day. How many liters could you collect in **1 week**?
  
  
  
  
  
  
  
  
  
  
11. After eating these hot chili peppers, you race at 20 miles per hour to find a glass of water. How fast were you travelling in feet per second?