

Name Key

CCGPS Coordinate Algebra Unit 1

MCC9-12.A.CED.1, MCC9-12.A.CED.3, MCC9-12.N.Q.1, MCC9-12.N.Q.2, MCC9-12.N.Q.3

Use Decimals, Round to hundredths place (ex: 7.45) except for #4, #8,
Unit Conversions Practice

<p>5280 feet = 1 mile .034 ounces = 1 milliliter 0.454 kilograms = 1 pound 1.6 kilometers = 1 mile 73 gallons = 2 barrels 1.05 quarts = 1 liter 4 quarts = 1 gallon</p>	<p>12 inches = 1 foot 1000 milliliters = 1 liter 60 sec = 1 minute 60 minutes = 1 hour 24 hours = 1 day 365 days = 1 year</p>
<p>1. Convert 23 miles to feet $\frac{23 \text{ miles}}{1} \cdot \frac{5280 \text{ ft}}{1 \text{ mile}} = \boxed{121,440 \text{ ft}}$</p>	<p>2. Convert 120 lbs to kilograms. $\frac{120 \text{ lbs}}{1} \cdot \frac{.454 \text{ kg}}{1 \text{ lb}} = \boxed{54.48 \text{ kg}}$</p>
<p>3. Convert 451 mL to ounces. $\frac{451 \text{ mL}}{1} \cdot \frac{.034 \text{ oz}}{1 \text{ mL}} = \boxed{15.33 \text{ oz}}$</p>	<p>4. Convert 6 feet to miles. $\frac{6 \text{ ft}}{1} \cdot \frac{1 \text{ mile}}{5280 \text{ ft}} = \boxed{.001 \text{ miles}}$</p>
<p>5. Convert 4 quarts to liters. $\frac{4 \text{ qt}}{1} \cdot \frac{1 \text{ liter}}{1.05 \text{ qt}} = \boxed{3.81 \text{ Liters}}$</p>	<p>6. Convert 0.045 barrels to gallons. $\frac{.045 \text{ barrels}}{1} \cdot \frac{73 \text{ gal}}{2 \text{ barrels}} = \boxed{1.64 \text{ gal}}$</p>
<p>7. Convert 75 minutes to days. $\frac{75 \text{ min}}{1} \cdot \frac{1 \text{ hr}}{60 \text{ min}} \cdot \frac{1 \text{ day}}{24 \text{ hr}} = \boxed{.05 \text{ days}}$</p>	<p>8. Convert 46 inches to miles $\frac{46 \text{ in}}{1} \cdot \frac{1 \text{ ft}}{12 \text{ in}} \cdot \frac{1 \text{ mile}}{5280 \text{ ft}} = \boxed{.0007 \text{ miles}}$</p>
<p>9. Convert 65 ounces to liters. $\frac{65 \text{ oz}}{1} \cdot \frac{1 \text{ mL}}{.034 \text{ oz}} \cdot \frac{1 \text{ Liter}}{1000 \text{ mL}} = \boxed{1.91 \text{ Liters}}$</p>	<p>★ 10. Convert one million seconds to years. $\frac{1,000,000 \text{ sec}}{1} \cdot \frac{1 \text{ min}}{60 \text{ sec}} \cdot \frac{1 \text{ hr}}{60 \text{ min}} \cdot \frac{1 \text{ day}}{24 \text{ hr}} \cdot \frac{1 \text{ yr}}{365 \text{ day}} = \boxed{.03 \text{ yrs}}$</p>
<p>★ 11. Convert 12 liters to barrels. $\frac{12 \text{ liters}}{1} \cdot \frac{1.05 \text{ qt}}{1 \text{ liter}} \cdot \frac{1 \text{ gal}}{4 \text{ qt}} \cdot \frac{2 \text{ barrels}}{73 \text{ gal}} = \boxed{.09 \text{ barrels}}$</p>	<p>★ 12. Find your age in seconds. i.e 15 yrs: $\frac{15 \text{ yr}}{1} \cdot \frac{365 \text{ day}}{1 \text{ yr}} \cdot \frac{24 \text{ hr}}{1 \text{ day}} \cdot \frac{60 \text{ min}}{1 \text{ hr}} \cdot \frac{60 \text{ sec}}{1 \text{ min}} = \boxed{473040000 \text{ sec}}$</p>

Name: Key

Unit Conversion Worksheet

Conversions

1 hour = 3600 seconds
1 meter = 3.28 feet
1 kg = 2.2 lbs
1 km = 1000m
100cm = 1 m

1 mile = 5280 feet
1 km = 0.62 miles
1 lb = 0.45 kg
1 foot = 12 inches

1 yard = 3 feet
1 light second = 300,000,000 meters
1 quart = 0.946 liters
1 inch = 2.54 cm = 25.4 mm

Convert the following quantities.

1) 565,900 seconds into days

$$\frac{565,900 \text{ sec}}{1} \cdot \frac{1 \text{ min}}{60 \text{ sec}} \cdot \frac{1 \text{ hr}}{60 \text{ min}} \cdot \frac{1 \text{ day}}{24 \text{ hr}} = \boxed{6.55 \text{ days}}$$

2) 17 years into minutes

$$\frac{17 \text{ year}}{1} \cdot \frac{365 \text{ day}}{1 \text{ year}} \cdot \frac{24 \text{ hr}}{1 \text{ day}} \cdot \frac{60 \text{ min}}{1 \text{ hr}} = \boxed{8,935,200 \text{ min}}$$

3) 43 miles into feet

$$\frac{43 \text{ miles}}{1} \cdot \frac{5280 \text{ ft}}{1 \text{ mile}} = \boxed{227,040 \text{ ft}}$$

4) 165 pounds into kilograms

$$\frac{165 \text{ pounds}}{1} \cdot \frac{.45 \text{ kg}}{1 \text{ lb}} = \boxed{74.25 \text{ kg}}$$

5) 100 yards into meters

$$\frac{100 \text{ yds}}{1} \cdot \frac{3 \text{ ft}}{1 \text{ yd}} \cdot \frac{1 \text{ meter}}{3.28 \text{ ft}} = \boxed{91.46 \text{ meters}}$$

6) 22,647 inches into miles

$$\frac{22,647 \text{ in}}{1} \cdot \frac{1 \text{ ft}}{12 \text{ in}} \cdot \frac{1 \text{ mile}}{5280 \text{ ft}} = \boxed{.36 \text{ miles}}$$

7) 2678 cm into feet

$$\frac{2678 \text{ cm}}{1} \cdot \frac{1 \text{ in}}{2.54 \text{ cm}} \cdot \frac{1 \text{ ft}}{12 \text{ in}} = \boxed{87.86 \text{ ft}}$$