Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit Conversions

GIVEN:

|  |  |  |
| --- | --- | --- |
| 1 km = 0.621 miles | 1 kg = 2.2 pounds | 1 inch = 2.54 cm |

**#1-10 Converting Single Measurements: Convert the following measurements. Round to the nearest hundredth if needed.**

1. Convert 20 minutes to seconds.
2. Convert 75 seconds to hours.
3. Convert 3 miles to feet.
4. Convert 125 yards to miles.
5. Convert 3 gallons to cups
6. Convert 4 km to meters.
7. Convert 50 meters to miles.
8. Convert 6 pounds to ounces.
9. Convert 130 pounds to kg.
10. Convert 500 g to pounds.

**#11-16 Converting Rates: Convert the following rates. Round to the nearest hundredth if needed.**

1. Convert 35 miles to hour to km/h.
2. Convert 10.5 feet/sec to yards/min.
3. Convert 50 meters per second to km/h.
4. Convert 130 km/h to feet per second.
5. Convert 10 mL per second to Liters per minute.
6. Convert 5 gallons an hour to cups per second.

**#17-21 Applications: Read through the given situations and convert units when necessary. Round to the nearest hundredth if needed.**

1. Daniel rode his bike for 2 hours and traveled 24 miles total. At what rate was he traveling?
2. A UPS package was shipped to Sheila. The height is inches, the length is 1.5 feet, and the width is 14 inches. What is the volume of the box?
3. A classroom has a length of 20 feet and a width of 30 feet. The headmaster decided that tiles would look good in that classroom. If each tile has a length of 24 inches and a width of 36 inches, how many tiles are needed to fill the classroom?
4. Deanna’s little sister wants to go on a carnival ride, but only children taller than 120 centimeters may go on it. Deanna’s sister is 4 feet tall. Can she go on the ride?
5. Light travels about 300,000 kilometers per second! The Sun is approximately 150,000,000 km away from the Earth. How many minutes does it take light from the Sun to reach Earth?
6. Noah’s brother drives him to school every morning. On average, he drives about 40 mph. How many feet do they travel in 5 minutes?
7. Polly was speeding on her way home to Atlanta and received a super speeder ticket! The speed limit was 55 miles per hour and for each mile an hour over the speed limit, she was charged $24. Then, she had to pay an extra $200 on top of that. The total cost of her ticket was $584. How fast was she going?