



## Conversions – Systems of Measure

### Chapter 6 Worksheet A - Answered

1. Exactly how many milliliters are in 1 pint?

- a) 480 mL
- b) 473 mL**
- c) 470 mL
- d) 463 mL

2. How many grams are in 1 kilogram?

- a) 10 g
- b) 100 g
- c) 1,000 g**
- d) 10,000 g

3. How many milliliters are in 1 Liter?

- a) 10 mL
- b) 100 mL
- c) 1,000 mL**
- d) 10,000 mL

4. How many milligrams are in 1 gram?

- a) 1 mg
- b) 10 mg
- c) 100 mg
- d) 1,000 mg**

5. How many micrograms are in 1 kilogram?

- a) 10 mcg
- b) 1,000 mcg
- c) 1,000,000 mcg
- d) 1,000,000,000 mcg**

6. How many micrograms are in 1 gram?

- a) 10 mcg
- b) 1,000 mcg
- c) 1,000,000 mcg**
- d) 1,000,000,000 mcg

#### Reference Information

##### Solids

1 kg = 1000 g  
1 kg = 2.2 lbs  
1 lb = 454.54 g  
1 lb = 16 oz  
1 oz ≈ 30 g  
1 g = 1000 mg  
1 gr ≈ 65 mg  
1 mg = 1000 mcg

##### Liquids

1 gal ≈ 3840 mL  
1 L = 1000 mL  
1 qt ≈ 960 mL  
1 pt = 473 mL  
1 fl oz = 30 mL  
1 mL ≈ 20 gtts  
1 mL ≈ 100u

7. How many micrograms are in 1 milligram?

- a) 10 mcg
- b) 1,000 mcg**
- c) 1,000,000 mcg
- d) 1,000,000,000 mcg

8. How many kilograms are there in 1 gram?

- a) 10 kg
- b) 0.1 kg
- c) 0.001 kg**
- d) 0.000001 kg

9. How many kilograms are there in 1 milligram?

- a) 10 kg
- b) 0.1 kg
- c) 0.001 kg
- d) 0.000001 kg**

10. How many kilograms are there in 1 microgram?

- a) 0.1 kg
- b) 0.001 kg
- c) 0.000001 kg
- d) 0.000000001 kg**



11. How many kilograms are in 454.54 g?

- a) 454,540 kg
- b) 0.45454 kg
- c) 0.045454 kg
- d) 0.00045454 kg

12. How many grams are in 235 mg?

- a) 0.235 g
- b) 0.000235 g
- c) 235,000 g
- d) 235,000,000 g

13. How many grams are in 438 mcg?

- a) 0.438 g
- b) 0.000438g
- c) 438,000 g
- d) 438,000,000 g

14. How many milliliters are in 0.3 L?

- a) 3,000 mL
- b) 300 mL
- c) 30 mL
- d) 3 mL

15. How many milliliters are in 32 L?

- a) 320 mL
- b) 3,200 mL
- c) 32,000 mL
- d) 320,000 mL

16. How many milliliters are in 300 L?

- a) 0.3 mL
- b) 3,000 mL
- c) 30,000 mL
- d) 300,000 mL

17. How many liters are in 0.6 mL?

- a) 600 L
- b) 6,000 L
- c) 0.006 L
- d) 0.0006 L

18. How many liters are in 48 mL?

- a) 480 L
- b) 4,800 L
- c) 0.48 L
- d) 0.048 L

19. How many liters are in 473 mL?

- a) 0.473 L
- b) 0.000473 L
- c) 473,000 L
- d) 473,000,000 L

20. How many liters are in 0.06 mL?

- a) 0.006 L
- b) 0.0006 L
- c) 0.00006 L
- d) 0.000006 L

21. How many liters are in 34.64 mL?

- a) 0.0003464 L
- b) 0.003464 L
- c) 0.03464 L
- d) 0.3464 L

22. Approximately how many drops are in 1 mL?

- a) 5 gtts
- b) 10 gtts
- c) 20 gtts
- d) 25 gtts



23. Approximately how many drops are contained in a 2.5 mL dropper?
- a) 20 gtts
  - b) 40 gtts
  - c) 50 gtts
  - d) 60 gtts
24. Approximately how many drops are contained in a 5 mL dropper?
- a) 50 gtts
  - b) 70 gtts
  - c) 90 gtts
  - d) 100 gtts
25. Approximately how many drops are contained in a 10 mL dropper?
- a) 100 gtts
  - b) 150 gtts
  - c) 200 gtts
  - d) 250 gtts
26. Approximately how many drops are contained in a 7.5 mL dropper?
- a) 75 gtts
  - b) 125 gtts
  - c) 150 gtts
  - d) 175 gtts
27. How many ounces are in 1 pound?
- a) 12 oz
  - b) 8 oz
  - c) 16 oz
  - d) 24 oz
28. Exactly how many ounces are in 2.2 lbs?
- a) 35.2 oz
  - b) 33.3 oz
  - c) 31.4 oz
  - d) 29.5 oz
29. Approximately how many ounces are in 0.03 kg?
- a) 1 oz
  - b) 0.1 oz
  - c) 0.66 oz
  - d) 0.5 oz
30. How many ounces are in 1.5 lbs?
- a) 20 oz
  - b) 24 oz
  - c) 28 oz
  - d) 32 oz
31. How many ounces are in 420 g?
- a) 10 oz
  - b) 12 oz
  - c) 14 oz
  - d) 16 oz
32. How many ounces are in 5000 mg?
- a) 1/6<sup>th</sup> oz
  - b) 1/8<sup>th</sup> oz
  - c) 1/10<sup>th</sup> oz
  - d) 1/12<sup>th</sup> oz
33. Using 30 g  $\approx$  1 oz, how many lbs are in 480 g?
- a) 2 lbs
  - b) 1 lb
  - c) 0.8 lb
  - d) 0.6 lb
34. Exactly how many grams are in 1 lb?
- a) 480 g
  - b) 474.34 g
  - c) 454.54 g
  - d) 434.74 g



35. If a doctor prescribes 3 oz of a medication, how many grams will you dispense?
- a) 80 g
  - b) 90 g**
  - c) 120 g
  - d) 150 g
36. If a doctor prescribes 1 oz of a medication, how many grams will you dispense?
- a) 25 g
  - b) 30 g**
  - c) 35 g
  - d) 40 g
37. If a doctor prescribes 6 oz of a medication, how many grams will you dispense?
- a) 120 g
  - b) 150 g
  - c) 180 g**
  - d) 210 g
38. If a doctor prescribes 12 oz of a medication, how many grams will you dispense?
- a) 240 g
  - b) 360 g**
  - c) 480 g
  - d) None of the above
39. If a doctor prescribes 8 oz of a medication, how many grams will you dispense?
- a) 200 g
  - b) 240 g**
  - c) 270 g
  - d) 300 g
40. Exactly how many kilograms are in 4.4 lbs?
- a) 2.3 kg
  - b) 2.2 kg
  - c) 2.1 kg
  - d) 2.0 kg**
41. Exactly how many kilograms are in 7 lbs?
- a) 3.18 kg**
  - b) 3.36 kg
  - c) 14.5 kg
  - d) 15.4 kg
42. Exactly how many kilograms are in 1 lb?
- a) 2.2 kg
  - b) 0.82 kg
  - c) 0.65 kg
  - d) 0.45 kg**
43. Exactly how many kilograms are in 8.8 lbs?
- a) 19.36 kg
  - b) 4.22 kg
  - c) 4.00 kg**
  - d) 3.84 kg
44. Exactly how many kilograms are in 22 lbs?
- a) 10.56 kg
  - b) 10.00 kg**
  - c) 9.54 kg
  - d) 8.36 kg
45. Approximately how many milligrams are in 5 grains?
- a) 300 mg
  - b) 325 mg**
  - c) 125 mg
  - d) 150 mg