

Name _____

Measuring the Cosmos Answer Key

1. $120 \text{ m} \div 1000 = \mathbf{0.12 \text{ km}}$
2. $0.75 \text{ km} \times 1000 = \mathbf{750 \text{ m}}$
3. $1,200,000 \text{ m} \div 1000 = \mathbf{1,200 \text{ km}}$
4. $8.2 \text{ km} \times 1000 = \mathbf{8,200 \text{ m}}$
5. $384,400 \text{ km} \times 1000 = \mathbf{384,400,000 \text{ m}}$
6. $225,000,000 \div 149,600,000 = \mathbf{1.50 \text{ AU}}$
7. $4,500,000,000 \div 149,600,000 = \mathbf{30.08 \text{ AU}}$
8. $14.96 \times 10^8 \div 149,600,000 = \mathbf{10 \text{ AU}}$
9. $4.01 \times 10^{13} \div 9.461 \times 10^{12} = \mathbf{4.24 \text{ light-years}}$
10. $9.461 \times 10^{11} \div 9.461 \times 10^{12} = \mathbf{0.10 \text{ light-years}}$
11. $24,000,000,000 \div 149,600,000 = \mathbf{160.45 \text{ AU}}$