

**Too big...too small...  
Just Right!**

---

**Show work on notebook paper!**

**Write in scientific notation:**

- 1) 945000
- 2) 12
- 3) 0.156000
- 4) 0.00000000853

**Write in standard notation:**

- 5)  $1.98 \times 10^4$
- 6)  $6.02 \times 10^{23}$
- 7)  $4.5 \times 10^{-6}$
- 8)  $2.71 \times 10^{-1}$

**What is wrong with the following problems? Explain in full sentences!**

- 9)  $0.54 \times 10^5$
- 10)  $97 \times 10^{-4}$
- 11) The diameter of an particular atom is  $1.3 \times 10^8$  cm.

**Solve the following word problems:**

- 12) In Australia, the people use approximately 2,240,000,000 pounds of bread in a year. How can we write this number in scientific notation?
- 13) If a satellite travels 62,000,000 miles from Earth, how can we write it in scientific notation?
- 14) 0.000065 is the wave length of yellow light. Can you express the measurement using scientific notation?
- 15) A proton weighs  $1.673 \times 10^{-27}$  kg, a neutron weighs  $1.75 \times 10^{-27}$  kg, and an electron weighs  $9.11 \times 10^{-31}$  kg. Write the heaviest particle's mass in standard notation.
- 16) A flea is  $8 \times 10^{-3}$  m long. It can jump  $3.5 \times 10^2$  times its own length. How far can it jump? Write your answer in standard notation.
- 17) The bedroom of a house is 1,200 cubic meters. We know that there are  $3.4 \times 10^9$  particles of dust per cubic meter. Write how many particles of dust are present in the bedroom of the house.

- 18) Explain the title of this worksheet. How does it relate topic of the practice problems?

**Too big...too small...  
Just Right!**

---

**Show work on notebook paper!**

**Write in scientific notation:**

- 1) 945000
- 2) 12
- 3) 0.156000
- 4) 0.00000000853

**Write in standard notation:**

- 5)  $1.98 \times 10^4$
- 6)  $6.02 \times 10^{23}$
- 7)  $4.5 \times 10^{-6}$
- 8)  $2.71 \times 10^{-1}$

**What is wrong with the following problems? Explain in full sentences!**

- 9)  $0.54 \times 10^5$
- 10)  $97 \times 10^{-4}$
- 11) The diameter of an particular atom is  $1.3 \times 10^8$  cm.

**Solve the following word problems:**

- 12) In Australia, the people use approximately 2,240,000,000 pounds of bread in a year. How can we write this number in scientific notation?
- 13) If a satellite travels 62,000,000 miles from Earth, how can we write it in scientific notation?
- 14) 0.000065 is the wave length of yellow light. Can you express the measurement using scientific notation?
- 15) A proton weighs  $1.673 \times 10^{-27}$  kg, a neutron weighs  $1.75 \times 10^{-27}$  kg, and an electron weighs  $9.11 \times 10^{-31}$  kg. Write the heaviest particle's mass in standard notation.
- 16) A flea is  $8 \times 10^{-3}$  m long. It can jump  $3.5 \times 10^2$  times its own length. How far can it jump? Write your answer in standard notation.
- 17) The bedroom of a house is 1,200 cubic meters. We know that there are  $3.4 \times 10^9$  particles of dust per cubic meter. Write how many particles of dust are present in the bedroom of the house.

- 18) Explain the title of this worksheet. How does it relate topic of the practice problems?

**Too big...too small...  
Just Right!**

---

**Show work on notebook paper!**

**Write in scientific notation:**

- 1) 945000
- 2) 12
- 3) 0.156000
- 4) 0.00000000853

**Write in standard notation:**

- 5)  $1.98 \times 10^4$
- 6)  $6.02 \times 10^{23}$
- 7)  $4.5 \times 10^{-6}$
- 8)  $2.71 \times 10^{-1}$

**What is wrong with the following problems? Explain in full sentences!**

- 9)  $0.54 \times 10^5$
- 10)  $97 \times 10^{-4}$
- 11) The diameter of an particular atom is  $1.3 \times 10^8$  cm.

**Solve the following word problems:**

- 12) In Australia, the people use approximately 2,240,000,000 pounds of bread in a year. How can we write this number in scientific notation?
- 13) If a satellite travels 62,000,000 miles from Earth, how can we write it in scientific notation?
- 14) 0.000065 is the wave length of yellow light. Can you express the measurement using scientific notation?
- 15) A proton weighs  $1.673 \times 10^{-27}$  kg, a neutron weighs  $1.75 \times 10^{-27}$  kg, and an electron weighs  $9.11 \times 10^{-31}$  kg. Write the heaviest particle's mass in standard notation.
- 16) A flea is  $8 \times 10^{-3}$  m long. It can jump  $3.5 \times 10^2$  times its own length. How far can it jump? Write your answer in standard notation.
- 17) The bedroom of a house is 1,200 cubic meters. We know that there are  $3.4 \times 10^9$  particles of dust per cubic meter. Write how many particles of dust are present in the bedroom of the house.

- 18) Explain the title of this worksheet. How does it relate topic of the practice problems?