

Do Now

When Jordan touched the plug, he got a shock that contained 5.9×10^{19} electrons. How many moles of electrons does this contain?

$$\frac{5.9 \times 10^{19} \text{ electrons}}{6.02 \times 10^{23} \text{ electrons}} \times \frac{1 \text{ mol}}{1} = 9.8 \times 10^{-5} \text{ mol}$$

0401 – HW

1) How many atoms in 2.50 mol of Zn?

1.51×10^{24} Zn atoms

2) How many moles in 5.75×10^{24} atoms of Al?

9.55 mol of Al

3) How many molecules in 11.5 mol of water?

6.92×10^{24} water molecules

4) How many moles in 2.50×10^{20} atoms of Fe

4.15×10^{-4} mol of Fe

0401 – HW

5) How many molecules in 3.25 mol of AgNO_3 ?

1.96×10^{24} AgNO_3 molecules

6) How many moles in 3.75×10^{24} molecules of CO_2 ?

6.23 mol of CO_2

7) How many moles in 3.58×10^{23} molecules of ZnCl_2 ?

0.595 mol of ZnCl_2

8) How many oxygen atoms in 5.00 mol of O_2

6.02×10^{24} atoms of oxygen