

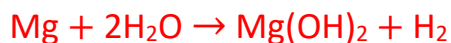
Name:

Class:



Magnesium reacts with water. Magnesium hydroxide and hydrogen are made.

Write a balanced symbol equation for this reaction.



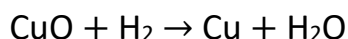
State the formula of a sulfate ion.



Give the formula for a molecule of ammonia.



Copper oxide can be reduced to copper by reaction with hydrogen.



A reaction mixture contains 1.59 g of copper oxide and 0.20 g of hydrogen.

1.27 g of copper and 0.36 g of water are made. Calculate the number of moles of each substance.

$$\text{Moles of CuO} = \text{Mass} \div \text{Mr}$$

$$\text{Moles of Cu} = \text{Mass} \div \text{Mr}$$

$$\text{Moles of H}_2 = \text{Mass} \div \text{Mr}$$

$$\text{Moles of CuO} = 1.59 \div 79.5$$

$$\text{Moles of Cu} = 1.27 \div 63.5$$

$$\text{Moles of H}_2 = 0.20 \div 2$$

$$\text{Moles of CuO} = \mathbf{0.02}$$

$$\text{Moles of Cu} = \mathbf{0.02}$$

$$\text{Moles of H}_2 = \mathbf{0.10}$$

$$\text{Moles of H}_2\text{O} = \text{Mass} \div \text{Mr}$$

$$\text{Moles of H}_2\text{O} = 0.36 \div 18$$

$$\text{Moles of H}_2\text{O} = \mathbf{0.02}$$

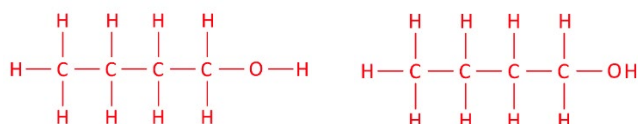
$$\text{Number of moles of CuO} = \mathbf{0.02}$$

$$\text{Number of moles of Cu} = \mathbf{0.02}$$

$$\text{Number of moles of H}_2 = \mathbf{0.10}$$

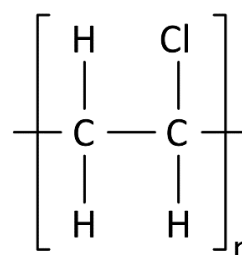
$$\text{Number of moles of H}_2\text{O} = \mathbf{0.02}$$

Draw the displayed formula of butanol, C₄H₉OH.



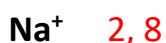
Accept either correct version.

Name the molecule shown below.



Poly (chloroethene)

Give the electronic configurations of the following:



In what two states do ionic compounds conduct electricity?

Molten and aqueous

Both must be stated correctly.