

Chemical Equations

When a piece of magnesium i	s added to dilute hydrochloric acid, fizzing o	occurs and hydrogen gas is
released from the mixture. The	ne fizzing is evidence that a(n)	has occurred
between magnesium and hyd	rochloric acid. The name given to either ma	gnesium or hydrochloric acid
n this case is, and the hydrogen gas that is released is called a		
	of the reaction. Some other indications that i	reactions have occurred
might be change of color or _	, or formation of a so	olid
	. If a thermometer is placed into a mixture	undergoing chemical
reaction, you might observe t	hat the temperature has gone up or down, in	ndicating that
was	being released or absorbed. The shorthand	form by which a reaction is
represented is called a (n)	· · · · · · · · · · · · · · · · · · ·	
	$\mathrm{Mg}(\mathrm{s}) + 2\mathrm{HCl}(\mathrm{aq}) \rightarrow \mathrm{MgCl}_{_2}(\mathrm{aq}) + \mathrm{H}_{_2}(\mathrm{g})$	
The compound(s) on the LEF	T of the arrow are the	, and the
compound(s) on the RIGHT	of the arrow are the	÷
A means t	that two compounds are being combined wit	th one another, and the
means "p	roduces" or "yields". You can tell the state o	of matter a compound is in
based on the abbreviation to	its right.	
s:1:	g:	
aq:	which means	



be	or	Or,
Γhe total mass of the	must equal the total	of the products.
	of reactant A are combined with 100 g	
	AB breaks down into 10 grams of proc v of conservation of mass, how much of	
Fill in the missing numbers so that	each reaction demonstrates the Law	of Conservation of Mass:
$g Mg + 16g O_2 \rightarrow 40.3 g Mg$	MgO	
12.2 g Mg + 8 g $O_2 \rightarrow$	_g MgO	
22.99 g Na + 35.45 g Cl →	g NaCl	
g H + 79.4 g O_2 → 89.	$4~\mathrm{g~H_{2}O}$	
$12.2 \text{ g CH}_4 + 14 \text{ g O}_2 \rightarrow \underline{\hspace{1cm}}$	${\rm CO_2}$ + 20g ${\rm H_2O}$	
Li + 5.7g O₂ → 24.6g LiO₂		