



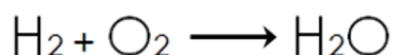
# CHEMICAL REACTIONS AND THEIR BALANCING with LEGO!

Students .....

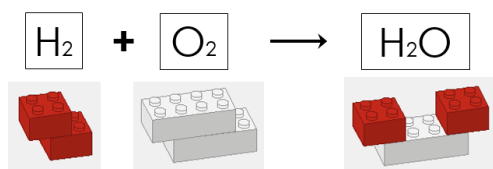
Class ..... Date ..... Group number .....

Try to build and balance these reactions using the LEGO bricks and the LEGO-periodic table projected on the LIM.

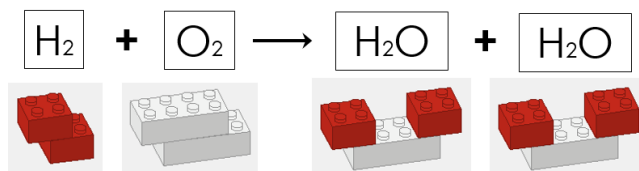
## CHEMICAL EQUATION 1 - EXAMPLE



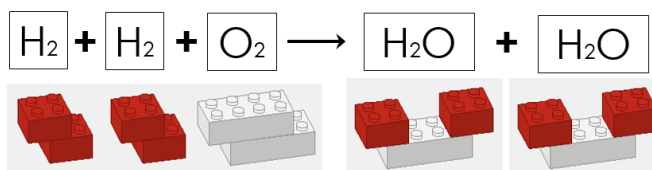
Using the LEGO bricks, **build the molecules** and put them in the right place:



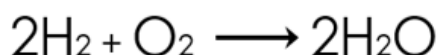
Count the **number of atoms**... two white bricks on the left and only one on the right!  
**To balancing** this equation, I must add one entire molecule of water on the right...



Count the **number of atoms**... two red bricks on the left and four on the right!!  
**To balancing** this equation, I must add one entire molecule of H<sub>2</sub> on the left...



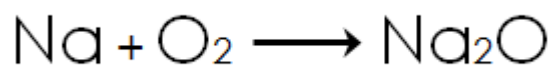
Use the coefficient and write the **balanced equation**:



Count the **number of atoms** involved and complete this table:

ELEMENTS	REACTANTS	PRODUCTS
H	4	4
O	2	2

## CHEMICAL EQUATION 2



**Build the molecules** and put them in the right place:



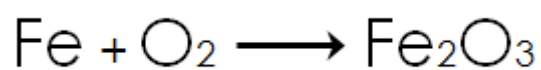
Use the coefficient and write the **balanced equation**:

.....

Count the **numbers of atoms** involved and complete this table:

ELEMENTS	REACTANTS	PRODUCTS
Na		
O		

## CHEMICAL EQUATION 3



**Build the molecules** and put them in the right place:



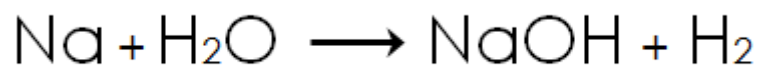
Use the coefficient and write the **balanced equation**:

.....

Count the **numbers of atoms** involved and complete this table:

ELEMENTS	REACTANTS	PRODUCTS
Fe		
O		

## CHEMICAL EQUATION 4



**Build the molecules** and put them in the right place:



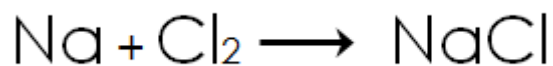
Use the coefficient and write the **balanced equation**:

.....

Count the **numbers of atoms** involved and complete this table:

ELEMENTS	REACTANTS	PRODUCTS
Na		
H		
O		

## CHEMICAL EQUATION 5



**Build the molecules** and put them in the right place:



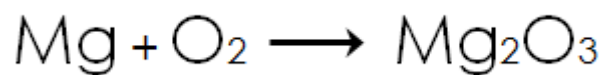
Use the coefficient and write the **balanced equation**:

.....

Count the **numbers of atoms** involved and complete this table:

ELEMENTS	REACTANTS	PRODUCTS
Na		
Cl		

## CHEMICAL EQUATION 6



**Build the molecules** and put them in the right place:



Use the coefficient and write the **balanced equation**:

.....

Count the **numbers of atoms** involved and complete this table:

ELEMENTS	REACTANTS	PRODUCTS
Mg		
O		