

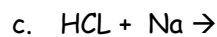
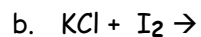
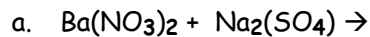
Tutorial 0010

1. Calculate the volume (in mL) of a 1.5 M NaOH that is needed to neutralize completely a 15 mL of 0.13 M H₃PO₄.

2. How does a size of the following species relate to each other? Use the following symbols <, > to describe it.

	ATOM		ION
a.	F	_____	F ⁻
b.	Mg	_____	Mg ²⁺
c.	Al	_____	(Aluminum Ion)
d.	Na	_____	(Sodium Ion)
e.	S	_____	(Sulphide ion)

3. Complete the reactions. Balance them and determine what is the type of the reaction and what is the driving force of the reactions:



4. What are Lewis structures of the following atoms:

a. Na

b. Ca

c. Al

d. F

e. Cl

f. C

5. Write an electron configuration of :

a. Na

b. O