Chemical Garden 2

- Worksheet -

1. Fill in the blanks to complete the chemical equations (and balance the equations).

Reaction	Chemical Equations
Osmotic growth of zinc sulfate solid in sodium silicate solution.	$ZnSO_4 + Na_2SiO_3$ --> _____ + Na_2SO_4
Osmotic growth of copper nitrate solid in sodium silicate solution.	$Cu(NO_3)_2 + Na_2SiO_3$ --> $CuSiO_3$ + _____
Osmotic growth of copper chloride solid in sodium silicate solution.	$CuCl_2$ + _____ --> _____ + 2NaCl
Osmotic growth of ferric chloride solid in sodium silicate solution.	_____ + _____ --> $Fe_2(SiO_3)_3$ + _____
Osmotic growth of calcium chloride solid in sodium silicate solution.	$CaCl_2$ + _____ --> _____ + _____
Osmotic growth of cobalt chloride solid in sodium silicate solution.	$CoCl_2$ + _____ --> _____ + _____

2. Describe the colors of the following reactions you see in the film.

Reaction	Color
Zinc sulfate solid in sodium silicate solution.	
Copper (II) nitrate solid in sodium silicate solution.	
Copper (II) chloride solid in sodium silicate solution.	
Iron (III) chloride solid in sodium silicate solution.	
Calcium chloride solid in sodium silicate solution.	
Cobalt (II) chloride solid in sodium silicate solution.	