Figure out formula, weight, % water

1. * Potassium carbonate sesquihydrate ($K_2CO_3 * 1.5H_2O$)
2. Cobalt II chloride hexahydrate ($CoCl_2 * 6H_2O$)
3. * Strontium chloride hexahydrate ($SrCl_2 * 6H_2O$)
4. Tin II chloride trihydrate ($SnCl_2 * 3H_2O$)
5. Iron II nitrate nonahydrate ($Fe(NO_3)_2 * 9H_2O$)
6. *Sodium tetraborate pentahydrate ($Na_2B_4O_7 * 5H_2O$)
7. * Sodium carbonate monohydrate ($Na_2CO_3 * H_2O$)
8. Sodium sulfate pentahydrate ($Na_2SO_4 * 5H_2O$)
9. * Magnesium sulfate heptahydrate ($MgSO_4 * 7H_2O$)
10. Iron III chloride hexahydrate ($FeCl_3 * 6H_2O$)

In the box below put the answers to 1-10 on top.
Show all work in composition book

Formula	Formula weight	Percent water
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Data for lab

Unknown _____

Mass of evaporating dish		g
Mass of dish and unknown (before heating)		g
Mass of dish & unknown (after heating)		g
Mass of dish & unknown after heating (2nd time)		g
Mass of dish and unknown after heating (3^{rd} time)		g

Lab Calculations

Mass of hydrated salt		g
Mass of anhydrous salt		g
Mass of water lost		g
% water		g
Identity of salt		

In the box below put the answers to 1-10 on top, staple all work

Formula	Formula weight	Percent water
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

In the box below put the answers to 1-10 on top, staple all work

	Formula	Formula weight	Percent water
1	$1.5H_20$		
2	$6H_20$		
3	$6H_20$		
4	$3H_20$		
5	$9H_20$		
6	$5H_20$		
7	H_20		
8	$5H_20$		
9	$7H_20$		
10	$6H_20$		

In the box below put the answers to 1-10 on top, staple all work

Formula	Formula weight	Percent water
1K $1.5H_20$		
2Co $6H_20$		
3Sr $6H_20$		
4Sn $3H_20$		
5Fe $9H_20$		
6Na $5H_20$		
7Na H_20		
8Na $5H_20$		
9Mg $7H_20$		
10Fe $6H_20$		

In the box below put the answers to 1-10 on top, staple all work

Formula	Formula weight	Percent water
$1K_2CO_3 * 1.5H_20$		
$2CoCl_2 * 6H_20$		
$3SrCl_2 * 6H_20$		
$4SnCl_2 * 3H_20$		
$5Fe(NO_3)_2 * 9H_20$		
$6Na_2(B_4O_7) * 5H_20$		
$7Na_2(CO_3) * H_20$		
$8Na_2(SO_4) * 5H_20$		
$9MgSO_4 * 7H_20$		
$10FeCl_3 * 6H_20$		

In the box below put the answers to 1-10 on top, staple all work

Formula	Formula weight	Percent water
$1K_2CO_3 * 1.5H_20$	165	
$2CoCl_2 * 6H_20$	238	
$3SrCl_2 * 6H_20$	267	
$4SnCl_2 * 3H_20$	243	
$5Fe(NO_3)_2 * 9H_20$	342	
$6Na_2(B_4O_7) * 5H_20$	292	
$7Na_2(CO_3) * H_20$	124	
$8Na_2(SO_3) * 5H_20$	232	
$9MgSO_4 * 7H_20$	246	
$10FeCl_3 * 6H_20$	270.5	

In the box below put the answers to 1-10 on top, staple all work

Formula	Formula weight	Percent water
$1K_2CO_3 * 1.5H_20$	165	16
$2CoCl_2 * 6H_20$	238	45
$3SrCl_2 * 6H_20$	267	40
$4SnCl_2 * 3H_20$	244	22
$5Fe(NO_3)_2 * 9H_20$	342	47
$6Na_2(B_4O_7) * 5H_20$	292	31
$7Na_2(CO_3) * H_20$	124	14
$8Na_2(SO_3) * 5H_20$	232	38
$9MgSO_4 * 7H_20$	246	51
$10FeCl_3 * 6H_20$	270.5	40

Procedure:

1. Clean and dry an evaporating dish and find its mass on an accurate balance.
2. Put 4-6 grams of the hydrate at your lab bench in your dish and find the mass again.
3. Heat under moderate heat for 3-5 minutes. Let the crucible cool and mass again.
4. Heat again under moderate heat for another 2 minutes. Let cool and find mass again.
5. Repeat this heating and weighing until the mass doesn't change any more (stays within .05 grams).
6. Record all of the masses until there is no more water left.
7. Scrape your anhydrous salt into the disposal container and clean up your area.

Unknown _____

Data for lab

1. Mass of dish _____g
2. Before heating
   - Mass of dish and unknown _____g
   - Mass of hydrate _____g
3. After heating
   - Mass of dish and unknown trial 1 _____g
   - Mass of dish and unknown trial 2 _____g
   - Mass of dish and unknown trial 3 _____g
   - Mass of dish and unknown (if needed) _____g
4. Mass of recovered anhydrous salt _____g
5. Mass of water lost (show work) _____g
6. % water (show work) _____g
7. Unknown identification _____