Growing Crystals of $KAl(SO_4)^{x}\ 12\ H_20$ and $KCr(SO_4)_2{}^{x}\ 12\ H_20$

potasium aluminum sulfate and potasium chromium sulfate

Materials:

Beakers
Graduated cylinder
Hot Plates
Clear Glasses or cups
$KAl(SO_4)^{x}\ 12\ H_20$ and $KCr(SO_4)_2{}^{x}\ 12\ H_20$ Mix
Safety glasses
Rocks
Hot Plates

Methods:

1) **Measure 80ml of water with a graduated cylinder (160ml if in pairs)**
2) **Boil water in a beaker (160ml if in pairs)**
3) **While water is warming, measure out 25 grams of the $KAl(SO_4)^{x}\ 12\ H_20$ and $KCr(SO_4)_2{}^{x}\ 12\ H_20$ Mix**
4) **Once the water begins to boil remove from heat and add the $KAl(SO_4)^{x}\ 12\ H_20$ and $KCr(SO_4)_2{}^{x}\ 12\ H_20$ mix and stir with a glass rod until in solution.**
5) **Place rocks into a labeled cup**
6) **Add the hot solution into the cup.**
7) **Carefully set the cup in an area that will not be disturbed**