Physics video of the week, number 4 -

## Making fuming nitric acid https://youtu.be/QmCdrDLyNXQ

	I True or false? Circle the correct answer and justify if it's false
①/F 1	Fuming nitric acid can light common lab gloves on fire.  True.
$T/\widehat{F}$ 2	] To make the fuming nitric acid, the speaker uses hydrochloric acid. False – The speaker uses $sulfuric$ acid.
$T/\widehat{F}$ 3	To speed up the reaction, the speaker cools down the reactants.  False – The reaction is sped up by <i>heating</i> the reactants, according to the Arrhénius equation.
$\bigcirc$ /F $\boxed{4}$	] The orange color comes from nitrogen dioxide gas. True – Excess heat decomposes the nitric acid to form ${\rm NO}_{2(g)}$ .
$T/\widehat{F}$ $5$	The process used to cool down the gas to a liquid form is called a crystallization.  False – It's a distillation, a common process in chemical reactions that form gases, and is a means of purification.
$(T)/F$ $\boxed{6}$	The speaker determines the concentration of his product by measuring its density.  True – Most physical properties of mixtures depend on the relative proportions of each compound.
$T/\widehat{F}$	Using gloves in a lab is something one must always do without thinking.  False – Every safety measure is well thought of beforehand.
	II Translate into English
<b>\$</b>	Oxydant : oxidizer
<b>♦</b>	Fusée : rocket
$\Diamond$	Faire bouillir : to boil
$\Diamond$	Colonne réfrigérante : condenser column
$\Diamond$	Feuille d'aluminium : aluminium foil
$\Diamond$	Sous vide : under vacuum

 $\Diamond$  Curieusement (expression idomatique) : oddly enough