Physics video of the week, number 4 —

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

	1 11 ue of laise: Circle the correct answer and justify in it's laise
$\Gamma/\mathrm{F}\left[1 ight]$	Fuming nitric acid can light common lab gloves on fire. True.
$\Gamma/\mathrm{F}\left[2 ight]$	To make the fuming nitric acid, the speaker uses hydrochloric acid.
	False – The speaker uses <i>sulfuric</i> acid.
Γ/F 3	To speed up the reaction, the speaker cools down the reactants.
	False – The reaction is sped up by $heating$ the reactants, according to the Arrhénius equation.
$\Gamma/\mathrm{F}\left[4\right]$	The orange color comes from nitrogen dioxide gas.
	True – Excess heat decomposes the nitric acid to form $NO_{2(g)}$.
$\Gamma/\mathrm{F}\left[5\right]$	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.
Γ/F 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.
Γ/F 7	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
\Diamond	Oxydant : oxidizer
\Diamond	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