

## Activity C1 : Detect presence of water

- Goals :
- \* Discover chemistry objects
  - Learn security rules in chemistry
  - Use anhydrous copper sulfate

### Where is Holmes' pipe ?

	<p>Detective Holmes : Watson , someone has stolen my pipe !!</p> <p>Doctor Watson : I have no idea Mr Holmes , but I know a fortune teller !</p> <p>Holmes : Are you kidding me ? This is not science !!</p> <p>Watson : I know but that is my only solution !</p> <p>Holmes : Pfff ...I don't know why I keep you as a partner ....Ok let's go to see her !</p>
	<p>Watson : Good evening miss Irma</p> <p>Irma : Hello guys , give me 1000 pounds first !</p> <p>Watson : It's very expensive , but we have no choice ..... here you are !</p> <p>Irma : I can see , I can see someone with a bag !</p> <p>Holmes : Ok , but what do you see in his bag ?</p> <p>Irma : <b>I see one thing with water and three things without water !</b></p> <p>Watson : Thank you Irma , maybe we can make some tests with <b>the anhydrous copper sulfate !!</b></p> <p>Holmes : Elementary my dear Watson !</p>

There are four suspects . Watson is asking them to know what they've got in their bag today .

<p>Miss Hudson's bag</p> <p>Oil</p> <p>Lemon juice</p> <p>Crisps</p> <p>Apple</p>	<p>Moriarty's bag</p> <p>Oil</p> <p>Apple</p> <p>Rice</p> <p>Crisps</p>	<p>Sebastian Moran's bag</p> <p>Potatoes</p> <p>Sugar</p> <p>Lemon juice</p> <p>Clementine</p>	<p>John Douglas' bag</p> <p>Apple</p> <p>Orange juice</p> <p>Potatoes</p> <p>Pasta</p>
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**We want to know what solids or liquids contain water ? (or not)**

Mission 1 : Anhydrous copper sulfate is :

A blue powder	A white liquid
A blue liquid	A white powder

Mission 2 : Explain in French your experiment

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Mission 3 : Draw your experiment

Mission 4 : Complete this note

Thing tested	Potatoes	Oil			
Colour of powder					
Water or not ?					

Thing tested					
Colour of powder					
Water or not ?					

Mission 5 : Find the guilty person

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