

Topic	Tests for ions and gases	Level	GCSE
Outcomes	<ol style="list-style-type: none">1. To describe the tests for common gases2. To describe the tests for common cations and ions3. To identify an unknown ionic compound from its ion tests		

Name of gas	Formula	Description of test and positive result
hydrogen		
oxygen		
carbon dioxide		
ammonia		
chlorine		

What am I?

1. I am diatomic, used in respiration and relight a glowing splint?
2. I am produced by respiration and turn lime water cloudy?
3. I bleach damp litmus paper and was used in the trenches?
4. I am a fuel that can be used in cars, I only produce water when I combust?
5. I am made of 4 atoms and turn damp red litmus paper blue?

Ion	Flame colour
Li ¹⁺	
Na ¹⁺	
K ¹⁺	
Ca ²⁺	

Ion	Precipitate colour with AgNO ₃ with HNO ₃	Formula of precipitate
Cl ¹⁻		
Br ¹⁻		
I ¹⁻		

If you're not part of the solution, you're part of the precipitate!

Ion	Precipitate colour with NaOH	Formula of precipitate
Cu ²⁺		
Fe ²⁺		
Fe ³⁺		

Ion	Test	Positive result
NH ₄ ⁺		
SO ₄ ²⁻		
CO ₃ ²⁻		

e.g





