

## Science 1.8 AS 90947 Investigate selected chemical reactions

### Precipitation Reactions – Using solubility rules to predict precipitates

**Success Criteria: complete each level before moving onto the next**

- Basic: beside each compound write **S (soluble) or I (insoluble)**
- Proficient: write the **solubility rule used with exceptions**
- Advanced: give the **formula** for each compound

Ion	Rule	Exceptions
nitrate	soluble	
chloride	soluble	silver and lead
sulfate	soluble	lead, calcium, barium
carbonate	insoluble	sodium
hydroxides	insoluble	sodium

compound	S or I	solubility rule used	formula of compound
lead sulfate			
sodium carbonate			
iron (II) nitrate			
magnesium hydroxide			
zinc chloride			
copper carbonate			
barium sulfate			
calcium chloride			
silver nitrate			
magnesium carbonate			
zinc nitrate			
sodium chloride			
Barium carbonate			
Iron (III) sulfate			