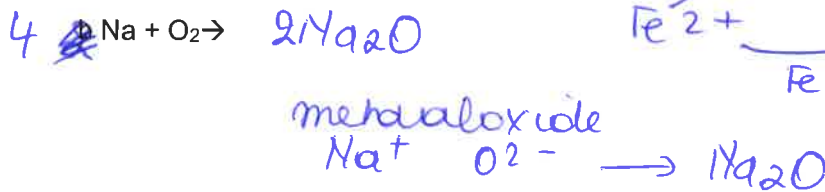
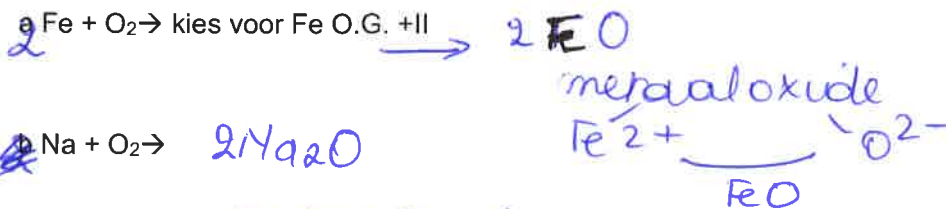
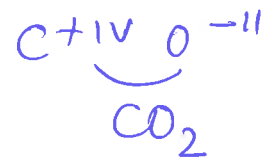
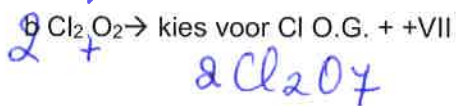


## 8. Reactiepatronen bij anorganische verbindingen.

## Reactiepatronen

- 1 Metaal + O<sub>2</sub> → metaaloxide
- 2 Niet-metaal + O<sub>2</sub> → niet-metaaloxide
- 3 Metaaloxide + water → hydroxide
4. Niet-metaaloxide + water → zuur
5. Metaaloxide + zuur → zout + water
- 6 Niet-metaaloxide + hydroxide → zout + water
- 7 Zuur + base (meestal hydroxide) → zout + water
- 8 Metaal + water → hydroxide + H<sub>2</sub>
- 9 Metaaloxide + niet-metaaloxide → zout
- 10 Zuur + metaal → zout + H<sub>2</sub>
- 11 Niet-metaal + H<sub>2</sub> → bineair zuur
- 12 Zuur → niet-metaaloxide + water
- 13 Hydroxide → metaaloxide + water

## Oefeningen

1 Metaal + O<sub>2</sub> → metaaloxide2 Niet-metaal + O<sub>2</sub> → niet-metaaloxidea C + O<sub>2</sub> → kies voor C O.G. + IVb Cl<sub>2</sub> + O<sub>2</sub> → kies voor Cl O.G. + +VII

## 3 Metaaloxide + water → hydroxide

a. kaliumoxide en water



b. bariumoxide en water c ijzer(II)oxide en water





d. ijzer(III)oxide en water



#### 4. Niet-metaaloxide + water → zuur

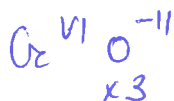
a. stikstof(V)oxide en water



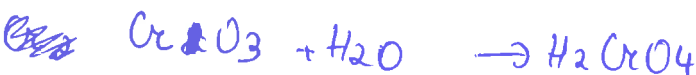
b. chloor(VII)oxide en water



c. zwavel(IV)oxide en water



d. chroom(VI)oxide en water



e. koolstof(IV)oxide en water



f. fosfor(III)oxide en water

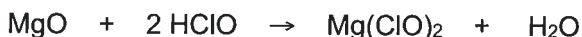


g. fosfor(V)oxide en water

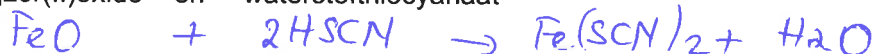


#### 5. Metaaloxide + zuur → zout + water

a. magnesiumoxide en waterstofhypochloriet



b. ijzer(II)oxide en waterstofthiocyanaat

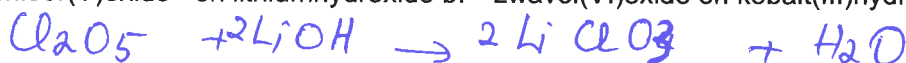


c. aluminiumoxide en waterstofsulfiet

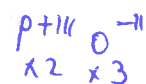
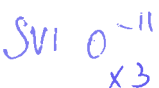
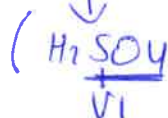
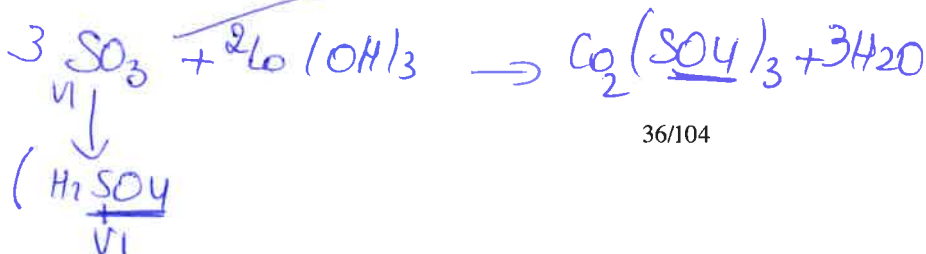


#### 6 Niet-metaaloxide + hydroxide → zout + water

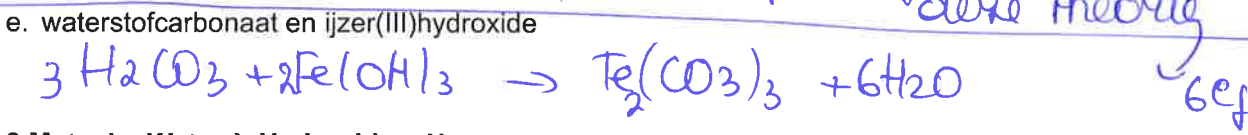
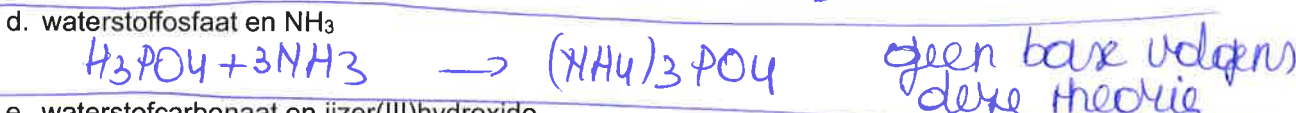
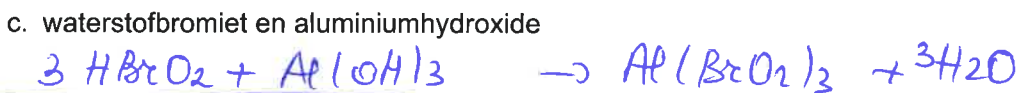
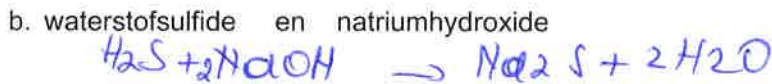
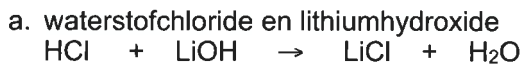
a. chloor(V)oxide en lithiumhydroxide b. zwavel(VI)oxide en kobalt(III)hydroxide



c. fosfor(III)oxide en bariumhydroxide



7 Zuur + base (meestal hydroxide) -----> zout + water



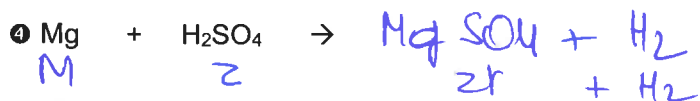
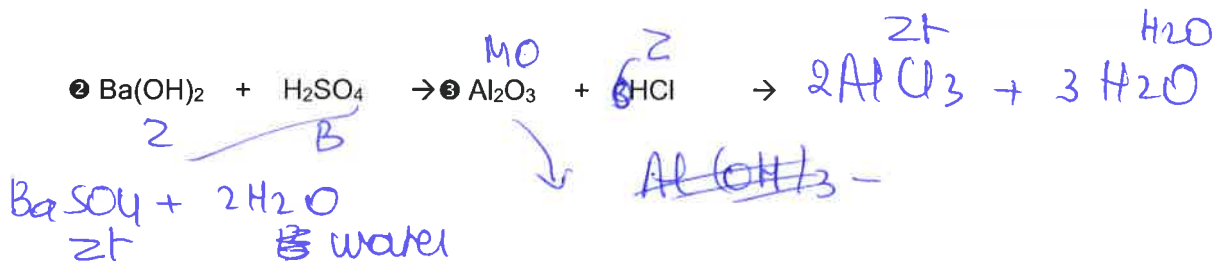
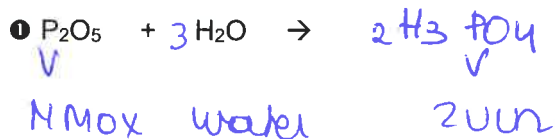
STAAT in  
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 groep  
 ↓  
 om  
 H<sub>2</sub>O!

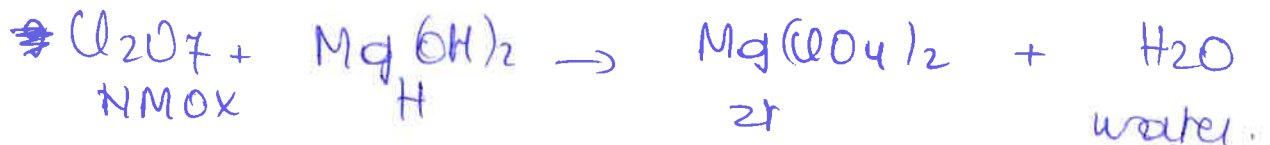
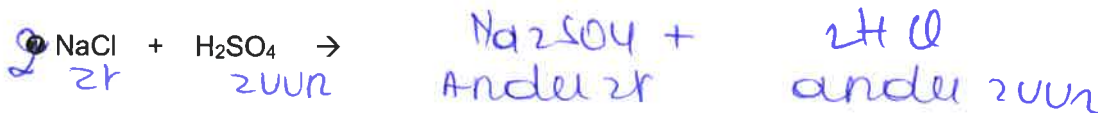
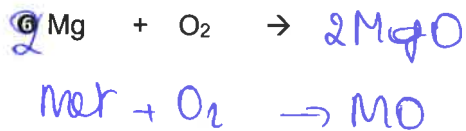
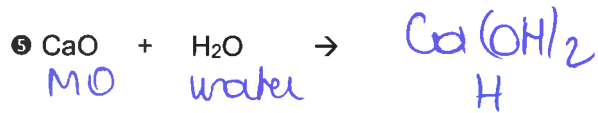
8 Metaal + Water → Hydroxide + H<sub>2</sub>



Oefeningen

1 Vul de volgende reactievergelijking aan en geef het reactiepatroon.



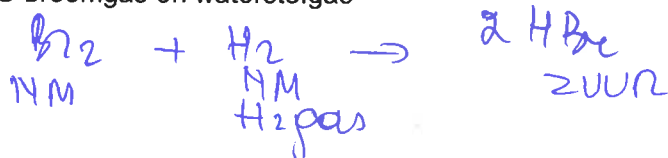


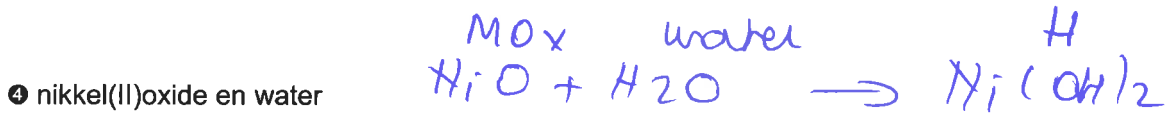
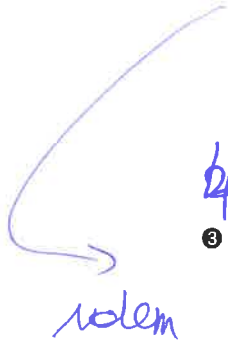
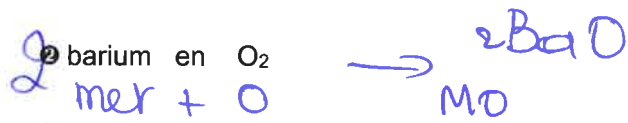
10 ammoniak en fosfor(III)oxide



2 Vul de volgende reactievergelijking aan en geef het reactiepatroon.

1 broomgas en waterstofgas





5 koper(I)oxide en water



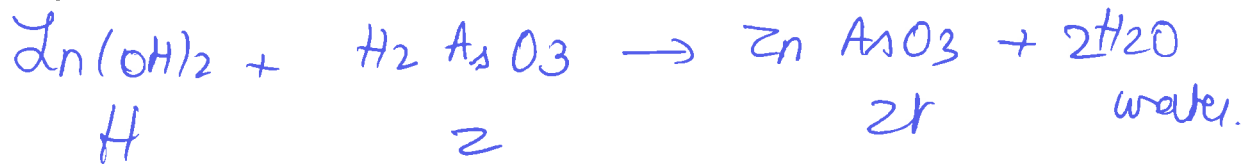
6 aluminiumhydroxide en waterstofthiosulfaat



7 waterstofperjodaat en ijzer(III)hydroxide



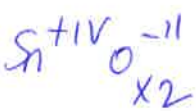
8 zinkhydroxide en waterstofarseniet



9 kobalt(III)oxide en waterstofchromaat

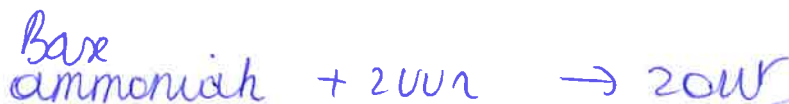


10 tin(IV)oxide en waterstofnitriet



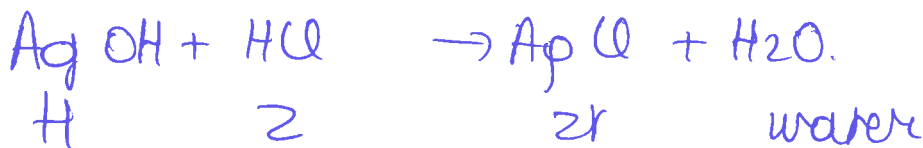
3 Vul de volgende reactievergelijking aan en geef het reactiepatroon.

1 ammoniak en waterstofsulfide

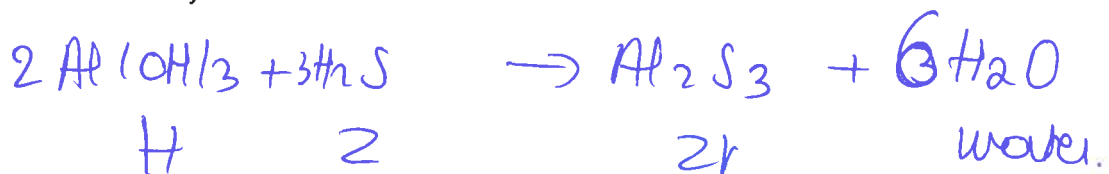


speciale omdat  $\text{NH}_3$  niet behoort tot hydroxiden

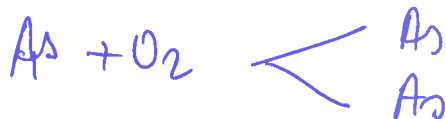
2 zilverhydroxide en waterstofchloride



3 aluminiumhydroxide en waterstofsulfide



4 arseen en O<sub>2</sub> (geef de twee mogelijkheden)



5 lithium en zwavel



#### 4 Extra oefeningen reactiepatronen



3  $\text{MgO} + \text{SO}_2$  met oxide + niet met oxide  $\rightarrow$  zout



4  $\text{MgO} + \text{H}_2\text{SO}_4$  met oxide + zuur  $\rightarrow$  water en zout

