

# Worksheet 5.4

## The reactions of acids

1 Complete the following sentences about some of the key features of acids.

- a All acids produce ..... gas when they react with metals.
- b All acids produce ..... gas when they react with carbonates.
- c Weak acids such as ..... react more slowly than strong ones.

2 Acids also produce salts when they react:

- ◆ Sulfuric acid always produces **sulfates**.
- ◆ Hydrochloric acid always produces **chlorides**.
- ◆ Nitric acid always produces **nitrates**.
- ◆ Ethanoic acid always produces **ethanoates**.

Complete the table below.

Acid	Other reactant	Salt produced	Other product(s)
hydrochloric acid	magnesium		
nitric acid	copper carbonate		
sulfuric acid	magnesium		
sulfuric acid	iron		
	zinc	zinc chloride	
	sodium carbonate	sodium sulfate	
hydrochloric acid	calcium hydroxide		
ethanoic acid		sodium ethanoate	water
nitric acid	ammonia solution		