Laboratory Preparation of Hydrogen Gas

# Timothy Langer 4E

## Observations

When performing this displacement reaction, the zinc fizzed and turned black. The bubbles were presumably of hydrogen gas. The solution turned cloudy

### Zinc and hydrochloric acid

#### Word equation

Zinc + Hydrochloric acid → Zinc chloride + Hydrogengas

#### Balanced symbol equation

Zn + 2HCl → H2 + ZnCl2

### ‘Squeaky pop’

#### Word equation

Hydrogen + Oxygen → Water

#### Balanced symbol equation

2H2 + O2 → 2H2O

### How would you know when the reaction between the zinc and the hydrochloric acid had finished?

The zinc will have stopped fizzing and turned black.

### How would you know if the reaction finished because the acid had all been used up first?

There would be unreacted zinc left that would still have a silver colour and not have turned black.