

## Science 1.8 AS 90947 Investigate selected chemical reactions

### Justifying your choice of reaction

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

- Basic: **label each reaction type**
- Proficient: **fill in the missing words** for each justification of a reaction type
- Advanced: write an example with **reactants and products** for each reaction

Reaction types to select from are: **displacement, precipitation, combination, thermal decomposition**

1. Sodium carbonate is heated.

**Reaction type:** \_\_\_\_\_

**Justification:** these reactions occur when \_\_\_\_\_ substance is broken apart with the use of \_\_\_\_\_ energy into \_\_\_\_\_ or \_\_\_\_\_ smaller substances.

**Example:** \_\_\_\_\_  
\_\_\_\_\_

2. Magnesium metal is burnt in oxygen.

**Reaction type:** \_\_\_\_\_

**Justification:** these reactions occur when \_\_\_\_\_ reactants \_\_\_\_\_ to form \_\_\_\_\_ product.

**Example:** \_\_\_\_\_  
\_\_\_\_\_

3. silver nitrate solution is added to sodium chloride solution.

**Reaction type:** \_\_\_\_\_

**Justification:** these reactions occur when two \_\_\_\_\_ react together to form a \_\_\_\_\_ that settles out of the solution. The solid formed is called the \_\_\_\_\_.

**Example:** \_\_\_\_\_  
\_\_\_\_\_

4. zinc metal is placed in a solution of lead nitrate.

**Reaction type:** \_\_\_\_\_

**Justification:** these reactions occur when a \_\_\_\_\_ and salt ( \_\_\_\_\_ compound) solution are mixed and the more \_\_\_\_\_ metal replaces the \_\_\_\_\_ in the salt.

**Example:** \_\_\_\_\_  
\_\_\_\_\_