

## Learning objectives

- Develop an understanding that chemical reactions are associated with energy transfers
- Gain an appreciation that energy can be transferred as light as well as heat
- Understand that chemical reactions can cause colour change due to new products being formed
- Gain an appreciation that chemical reactions can result in colours that have a variety of useful applications
- Understand that we can see different colours because light of different wavelengths enters our eyes

## Workshop content - students will:

- Investigate chemiluminescence and bioluminescence
- Carry out a precipitation reaction to illustrate pigment production
- Demonstrate the effect of burning salts of various metals and observing the colours produced
- Have the opportunity to paint with phosphorescent and thermochromic paint

## National Curriculum links

### Sc1 Scientific enquiry

### Sc3 Materials and their properties

#### 1) Classifying materials

e. how elements combine through chemical reactions to form compounds

#### 2) Changing materials

h. that virtually all materials, including those in living systems, are made through chemical reactions, and to recognise the importance of chemical change in everyday situations

## Picture gallery



Burn metal salts to observe colours



Colour producing chemical reactions have many useful applications