



# SCIENCE EXPERIMENT/STEM ACTIVITY

Safety Guide

Youth Group

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Key Benefits

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Control Measures

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Checklist Items

## KEY BENEFITS

### Critical Thinking

Enhances critical thinking and problem-solving skills through experimentation.

### Scientific Curiosity

Promotes curiosity and a love for learning in scientific fields.

### Technical Skills

Develops hands-on technical skills and practical knowledge.

### Innovation

Encourages innovation and creative thinking in STEM activities.

**KEY HAZARDS & CONTROL MEASURES****Chemical Hazards**

- ✓ Age-appropriate chemicals only
- ✓ Spill kit available
- ✓ Safety goggles mandatory
- ✓ Eye wash station accessible

**Heat & Fire**

- ✓ Heat-resistant equipment used
- ✓ Flammables stored safely
- ✓ Fire extinguisher accessible
- ✓ Long hair tied back

**Electrical Hazards**

- ✓ Equipment PAT tested
- ✓ No water near electrics
- ✓ Low voltage where possible
- ✓ RCD protection used

**Sharp Equipment**

- ✓ Proper handling demonstrated
- ✓ Broken glass protocol clear
- ✓ Sharps disposed safely
- ✓ First aid kit ready

**PRE-SESSION SAFETY CHECKLIST****Risk Assessment**

- |  |   |
|--|---|
| <input type="checkbox"/> Complete and review risk assessment for this activity | <input type="checkbox"/> Ensure all identified hazards have control measures in place |
| <input type="checkbox"/> Brief all staff on key risks and emergency procedures |   |

**Materials**

- |  |   |
|--|---|
| <input type="checkbox"/> Age-appropriate chemicals | <input type="checkbox"/> COSHH reviewed |
| <input type="checkbox"/> Labeling clear            | <input type="checkbox"/> Storage secure |

**PPE**

- |   |  |
|---|--|
| <input type="checkbox"/> Goggles available  | <input type="checkbox"/> Lab coats ready   |
| <input type="checkbox"/> Gloves appropriate | <input type="checkbox"/> Closed shoes worn |

**Environment**

- |   |   |
|---|---|
| <input type="checkbox"/> Ventilation adequate | <input type="checkbox"/> Spill kit ready            |
| <input type="checkbox"/> Eye wash available   | <input type="checkbox"/> Fire extinguisher in place |

**Emergency**

- |   |   |
|---|---|
| <input type="checkbox"/> First aid kit stocked    | <input type="checkbox"/> Evacuation route clear |
| <input type="checkbox"/> Emergency contacts ready | <input type="checkbox"/> Waste disposal planned |



RISK ASSESSMENT  
WIZARD

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