Harlowbury "Believe, Succeed, Inspire"

Primary School

Harlowbury Primary School Health and Safety Policy for Science and Design & Technology Learning

January 2022

Ratified by the Governing Body: Ratified Spring 2022

Review Date: Spring 2024

This policy is concerned with health and safety when teaching science and Design and Technology in school.
It has been produced with the approval of the local governing body.

Duties of staff
The Local Governing Body and the staff at Harlowbury primary School have the ultimate responsibility to ensure the health and safety of employees and others at this school.

The task of overseeing health and safety in this school has been delegated by the Templefields Multi- Academy Trust to the headteacher and Local Governing Body.

Within science and Design and Technology this task has been further delegated to the science and Design & Technology Subject leaders.

It is the duty of all staff (and, where relevant, non-employees such as volunteers)

- To take reasonable care for the health and safety of themselves and others who may be affected by their acts or omissions.
- To be familiar with this policy by periodic reference to it.
- To implement the provisions of this policy; and to cooperate with the employer and with other members of staff in promoting health and safety.

Advice on health and safety matters in Science and Technology

We have a subscription to CLEAPSS, Brunel University, Uxbridge UB8 3PH (Tel: 01895 251 496; Fax: 01895 814 372; e-mail: science@cleapss.org.uk; website: www.cleapss.org.uk) for the purpose of obtaining risk assessments and for general advice on health and safety matters in science. In an emergency, advice can be obtained by contacting CLEAPSS.

Be safe! Booklet

We believe science in primary schools to be a very safe activity and do not consider that the few, small risks justify excessive bureaucracy.

This school's health and safety policy for teaching science and technology is largely contained within Be safe! Health and safety in school science and technology for teachers of 3- to 12-year-olds 4th edn. Hatfield: Association for Science Education, 2011 ISBN 978 0 86357 426 9

All teachers must check *Be safe!* from time to time and use it when planning their science activities. Where relevant guidance cannot be found in *Be safe!*, staff should consult CLEAPS

Risk Assessment

It is the duty of the employer, under the COSHH (Control of Substances Harzardous to Health) Regulations to make a risk assessment before microorganisms (eg moulds) or hazardous chemicals (including some 'kitchen' chemicals) are used. Under the Management of Health and Safety at Work Regulations the employer must make a risk assessment before hazardous activities are undertaken. As required by the employer, following guidance in the Management Regulations Approved Code of Practice, this school has adopted Be safe! as containing model risk assessments for the activities normally undertaken in teaching, science and technology in primary schools.

A model risk assessment is just that – a model, which is broadly appropriate for most classes, in most schools, most of the time. Teachers should review the advice and consider whether further modification is needed for the special circumstances of their lessons with their classes. Professional judgement is needed. For example, pupils who are early bilinguals may not fully understand the instructions and pupils with special needs may need special consideration. An activity, which is perfectly safe on a Monday morning, may be less so on a Friday afternoon or following a wet play time! Teachers must also use common sense in organising their classroom in a healthy and safe manner, eg, by avoiding trailing electrical leads, not allowing children to use construction kits just behind the door, etc.

If the proposed activities, chemicals, tools, or equipment are NOT covered by Be safe! or relevant CLEAPSS guides, etc, so far as risk assessment is concerned, a Special Risk Assessment must be obtained by contacting CLEAPSS.

When planning for science and technology learning, staff should note down any relevant and important health and safety information extracted from Be Safe! or elsewhere. This can be very brief comments and will only be necessary for a few topics but will satisfy the requirement that the 'significant findings of risk assessment should be recorded' and demonstrate that individuals acknowledge the risk involved.

Close Supervision

On some occasions, Be safe! states that an activity should be carried out 'under close adult supervision'. We interpret this as meaning that a small group of children (up to about 6) should have the undivided attention of the supervising adult. Such adults need not be teachers but, if they are volunteers , etc they must have been well

briefed before the activity on the nature of the risk by the teacher in charge and be aware of guidance in Be safe! etc.

Purchasing and storing resources

When purchasing equipment or materials, and especially mains- powered electrical equipment, staff must ensure that it is sate and appropriate for use by children of the relevant age. CLEAPSS produces guides to particular types of equipment. The guides in print may change, but a list of those currently available on its website, www.cleapss.org.uk. CLEAPSS staff members are very willing to discuss other equipment, not at present covered by guides.

Copies of relevant guides can be obtained free of charge, by contacting CLEAPSS. Staff are expected to consult the relevant guide (or CLEAPSS itself) if they are considering purchasing mains-powered operated electrical equipment.

Similar considerations apply when equipment, chemicals or other items are given to the school, eg, by parents, local companies, etc or brought in from home. They may not be sufficiently safe for school use. In general, our policy is not to accept such donations. Any mains- electrical equipment donated or borrowed from home must undergo a portable-appliance test before being used. Testing should be carried out in accordance with the employer's policy which in this school involves waiting until the regular check is completed.

Equipment and materials must be stored safely. Chemicals and any other hazardous items are away from children in the caretaker's cupboard.

Living Organisms

We believe that the responsible use of suitable animals, plants and microorganisms in the classroom not only enhances the curriculum, but also helps to promote respect for living things. Classroom uses of living organisms may raise issues about the health and safety of pupils and teachers (which are dealt with in Be safe! and other model risk assessments) and ,in the case of animals, about their welfare and the need to care for them humanely. We follow advice given by CLEAPSS publications, eg, L52 Small Mammals, L56 Housing and Keeping Animals, L124 Aquaria in Primary Schools: Electrical Safety, L181 Cold-Water Aquaria, L190 Studying Microorganisms in Primary Schools, L197 Giant African Land Snails, L201 Giant Millipedes, L206 Tadpoles, L227 Stick Insects, PS55 Bringing Pets and Other Animals into Schools.

Training

From time to time, we devote part of a staff training and development to reminding colleagues about this policy and the pivotal role of Be safe! and CLEAPSS. We review the policy and consider if changes are needed.

When new staff, especially student teachers and newly-qualified teachers, join the school, it is the duty of the science and design and technology to inform them about this policy.

Monitoring
Individual Risk Assessments for learning are monitored with planning and reviewed by the subject leaders and periodically by the Headteacher and site manager.

Special restrictions
There are no special restrictions in teaching science in this school.
The headteacher has decided that in addition to advice in *Be safe!* and relevant CLEAPSS publications, the following special restrictions will apply when teaching science.

- Pupils at Key Stage 1 should not use expanded polystyrene, because of the risk that they may poke it into ears, etc, possibly requiring surgery to extract it.
- Thin plastic (polystyrene) cups from drinks machines should not be used to hold hot water, because of the risk that they may be easily knocked over when pouring the water or may soften and collapse, in either case spilling hot water on those nearby.
- Glass containers should not normally be used by pupils in Years R to 4, by may be used in Years 5 and 6 when the nature of the work means that there is no realistic alternative.
- Rechargeable batteries should not be used for circuit work by pupils, because they may become very hot if short-circuited (but they can be used in equipment, for example, in Roamer robots, Lego motors, etc).
- Where iron filings are in use for work on magnets, these should be enclosed in clear plastic containers, sealed plastic bags or similar. Where iron filings are needed for other purposes, eg, separation of mixtures, pupils should be warned about the dangers of rubbing eyes with their fingers and work should normally be confined to pupils at Key Stage 2.
- Scrupulous hygiene must be observed before and after cooking activities or handling animals etc. Younger pupils should be supervised to ensure that they wash their hands properly.

HARLOWBURY RISK ASSESSMENT -

Activity: Science/DT

Assessment Date:

Educational Objectives:

Completed By:

HAZARD List significant hazards which may result in serious harm or affect several people.	WHO MIGHT BE HARMED? List groups of people who are especially at risk from the significant hazards identified.	IS THE RISK ADEQUATELY CONTROLLED? List existing controls or note where information may be found (e.g. information, instruction training, systems or procedures)	WHAT FURTHER ACTION IS REQUIRED TO CONTROL RISK? List the risks which are adequately controlled – proposed action where it is reasonably practicable to do so.
Burns- use of glue gun	Pupils Volunteers Staff	Low melting glue sticks to be used Googles and gloves to be used Supervision Number of children in the classroom Competent person changing saw& knife blades Clear and suitable workstations for tools Adequate instruction and support for children to use tools safely Use of tools controlled in lower KS2	Needs of the children – instructions to be clear, concise and supported with visuals and widgets as appropriate.
Cuts – use of junior hacksaws and craft knives	Pupils Volunteers Staff	Supervision Number of children in the classroom Competent person changing saw& knife blades Clear and suitable workstations for tools Adequate instruction and support for children to use tools safely Use of tools controlled in lower KS2	Needs of the children – instructions to be clear, concise and supported with visuals and widgets as appropriate.

Glass Beakers to be used for science experiments – breakage and cuts	Pupils Staff Visitors	Use in science lesson for experiment in year 5&6 only Clear concise instructions Paper and dustpan and brush available to clear up glass shards. Limit movement and ensure space between areas to avoiding bumping into tables	
Microbes – mold spores breathing in spores Asthma Breathing difficulties	Pupils Staff Volunteer	Sealed containers – video footage rather than first hand experience Clean up spills Disinfect the workstation before and after use Do not eat or drink near the workstation Wash hands regularly Dispose of microbes in a sealed container and bag.	Note Ensure children with asthma have up to date asthma plans and pumps in schools
Living organisms and animal There is a requirement under COSHH to assess and adequately control the risks of potential infection and allergic reactions.	Pupils Staff Volunteers	Handle animals no more than necessary, wash hands before & after and especially before meals Avoid contact wherever practicable with the animals. Some animals e.g. lambs may carry infections that could threaten a pregnancy. - Keep the animal housing clean and disinfect cages at regular intervals. Do not allow animals to wander freely on floors or tables unless these are cleaned immediately afterwards with hot water and detergent. All waste should be disposed of regularly. Where animals require fresh food, remove any uneaten surplus before it begins to decompose. Children should not touch animals if not supervised . Wash their hands before & after handling animals, cleaning cages etc. – Only obtain animals, particularly small mammals only from reputable suppliers.	Note obtain risk assessment from the company e,g, Paradise Park

LED Torches – damage to eyes	Pupils	Clear concise instructions and modeling how to use the torches Supervision Limited number of torches if appropriate	
Signed Date Reviewed			