Grays Convent

HIGH SCHOOL

Hazardous Substance Policy

This Policy was adopted by the RIG Committee – 1st November 2021
This Policy will be reviewed in Autumn 2022

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This policy should be read in conjunction with:

Health and Safety Policy

This policy was approved by RIG committee on

It will be reviewed in July 2022 or sooner if changes are needed

1. The role of this policy

This policy is to be read in conjunction with the GCHS Health and Safety policy and the Health & Safety policies of the Science and Art/Design/Technology departments. It provides an overall summary of how hazardous substances are dealt with in school.

2. General aims

You must make "suitable and sufficient" assessments of the risks created by hazardous substances.
Keep a record
If you have 5 or more employees, you need to record:

- The significant findings of the risk assessments as soon as practicable
- The steps you've taken to prevent or control exposure to hazardous substances

Review your assessments regularly
Plus, review an assessment immediately if:

- You have reason to suspect that a current risk assessment is no longer valid;
- There's been a significant change in the work that the risk assessment relates to; or
- Any regular monitoring you carry out of exposure to hazardous substances suggests that a review is necessary

This is set out in Control of substances hazardous to health regulations legislation 2002 (amended in 2003 and 2004):

Assessment of the risk to health created by work involving substances hazardous to health

An employer shall not carry out work, which is liable to expose any employees to any substance hazardous to health unless he has:
(a) Made a suitable and sufficient assessment of the risk created by that work to the health of those employees and of the steps that need to be taken to meet the requirements of these Regulations; and
(b) Implemented the steps referred to in sub-paragraph (a).

(2) The risk assessment shall include consideration of—
(a) The hazardous properties of the substance;
(b) Information on health effects provided by the supplier, including information contained in any relevant safety data sheet;
(c) The level, type and duration of exposure;
(d) The circumstances of the work, including the amount of the substance involved;
(e) Activities, such as maintenance, where there is the potential for a high level of exposure;
(f) Any relevant occupational exposure standard, maximum exposure limit or similar occupational exposure limit;
(g) The effect of preventive and control measures which have been or will be taken in accordance with regulation 7;
(h) The results of relevant health surveillance;
(i) The results of monitoring of exposure in accordance with regulation 10;
(j) In circumstances where the work will involve exposure to more than one substance hazardous to health, the risk presented by exposure to such substances in combination;
(k) The approved classification of any biological agent; and
(l) Such additional information as the employer may need in order to complete the risk assessment.

(3) The risk assessment shall be reviewed regularly and forthwith if—
(a) There is reason to suspect that the risk assessment is no longer valid;
(b) There has been a significant change in the work to which the risk assessment relates; or
(c) The results of any monitoring carried out in accordance with regulation 10 show it to be necessary,
And where, as a result of the review, changes to the risk assessment are required, those changes shall be made.

(4) Where the employer employs 5 or more employees, he shall record—
(a) The significant findings of the risk assessment as soon as is practicable after the risk assessment is made; and
(b) The steps, which he has taken to meet the requirements of regulation 7.

3. Health and safety roles

3.1 Duties, functions and tasks

The employer, Grays Convent High School, has the ultimate duty to ensure the health and safety of employees and others on the site.
The employer to the Head Teacher Mrs P Johnson / Health & Safety Officer, Mr P O'Hanlon, has delegated the task of overseeing health and safety on this site. Within the science department, this task is further delegated to Head of Science, Mrs K Bialek, and in the D&T department to Mrs Caruana.
The next review of this policy will be in July 2022 or sooner if changes are required.

3.2 Communications

Communication of health & safety information is of the greatest importance and is the task of the Heads of Department and Health and Safety Officer. All staff are issued with this policy.
Any new instructions, restrictions or rescinded (lifted) restrictions made by the employer are communicated to all staff in writing as well as being attached to the reference copy of this policy.

3.3 Monitoring and checking

The employer expects departments to monitor the implementation of this policy. Records of monitoring are kept by the Heads of Department.

4. Training

The person with the task of seeing that training is provided is Mrs P Johnson, the Head teacher and this is delegated to Heads of Department.

5. Risk assessments - Science

Every employer is required under various regulations[1] to supply employees with a risk assessment before any hazardous activity takes place. (Common hazardous activities carried out in science departments are listed in the publications below.) Because it is impracticable for the employer to write risk assessments for each of the many activities in school science, this employer follows the recommendation of the Health and Safety Commission to adopt published 'model' or 'general' risk assessments which school science departments adapt to their local circumstances.

[The employer has instructed that the following publications are to be used as sources of model (general) risk assessments.] / [The employer has endorsed the use of the following publications as sources of model (general) risk assessments.]

[CLEAPSS[2] publications generally]
[CLEAPSS, *Hazcards*, current edition]
[CLEAPSS, *Laboratory Handbook*, current edition]
[CLEAPSS, *Recipe Book,* current edition]
[CLEAPSS, L93, *Managing Ionising Radiations and Radioactive Substances*]

Whenever a new course is adopted or developed, all activities (including preparation and clearing-up work) are checked against the model risk assessments and significant findings are incorporated into texts in daily use, ie, the [scheme of work] / [technician notes]. The members of staff with the task of overseeing this process are Mrs K Bialek, Mrs G Levins and Mrs A Goddard.

If a model risk assessment for a particular operation involving hazards cannot be found in these texts, a special risk assessment is obtained, following the employer's instructions, from [CLEAPSS] In order to assess the risks adequately, the following information is collected.

- Details of the proposed activity.
- The age and ability of the persons likely to do it.

- Details of the room to be used, i.e., size, availability of services and whether or not the ventilation rate is good or poor.
- Any substance(s) possibly hazardous to health.
- The quantities of substances hazardous to health likely to be used, including the concentrations of any solutions.
- Class size.
- Any other relevant details, eg, high voltages, heavy masses, etc.

Since the [scheme of work] has been checked against the model risk assessments, staff should deviate from it only if their proposed activities have been agreed with Mrs K Bialek the Head of Science.

We encourage the development of new practical activities (including on open evenings, at science clubs, etc) but these should be undertaken only after a prior check against model risk assessments and/or a special risk assessment has been obtained.

Where an activity must be restricted to those with special training, that restriction is included in a note on the text.

5.1 Risk assessments – Art, Design & Technology

Whenever a new course is adopted or developed, all activities (including preparation and clearing-up work) are checked against the model risk assessments and significant findings are incorporated into texts in daily use, i.e. the scheme of work. The members of staff with the task of overseeing this process are Miss Caruana, Head of Art, D&T and the department technician.

If a model risk assessment for a particular operation involving hazards cannot be found in these texts, a special risk assessment is obtained, following the employer's instructions, from CLEAPSS. In order to assess the risks adequately, the following information is collected:

- Details of the proposed activity.
- The age and ability of the persons likely to do it.
- Details of the room to be used, i.e., size, availability of services and whether or not the ventilation rate is good or poor.
- Any substance(s) possibly hazardous to health.
- The quantities of substances hazardous to health likely to be used, including the concentrations of any solutions.
- Class size.
- Any other relevant details, e.g. suitability of machinery and tools for the age group and abilities of those present.

Since the scheme of work has been checked against the model risk assessments, staff should deviate from it only if their proposed activities have been also checked with the models and agreed with the Head of Department.

We encourage the development of new practical activities (including on open evenings, at D&T extra-curricular activities, etc.) but these should be undertaken only after a prior check against model risk assessments and/or a special risk assessment has been obtained.

Where an activity must be restricted to those with special training, that restriction is included in a note on the text.

Photography – CLEAPPS Risk assessments are followed – see appendices

Darkroom General Safety Rules:
Limit access to the darkroom. Only authorized persons should be allowed to work in the room.
Practice good housekeeping. Keep the work area clean and uncluttered to prevent tripping over hazardous chemical bottles.
Separate the wet and dry areas.
Always segregate chemicals. Do not store acids near reducer!
Use the least toxic chemicals available. Avoid cyanides, heavy metals, and developers containing pyrocatechol or pyrogallol when possible.
Do not store chemicals on the floor.
Do not eat, drink or smoke in the darkroom.
The darkroom should be well ventilated.
Wear appropriate protective equipment whenever possible, such as gloves, goggles, etc.
Always wash hands with soap and warm water after working with chemicals.
Know how to use emergency equipment prior to an actual emergency.
Always Add Acid to water, never water to acid. (Remember 'AAA')
Keep a spill kit in the darkroom.
Do not use paper towels or sawdust to clean up acid spills as this may cause a fire.
Pregnant women should not be exposed to powdered developer.
Store all chemicals in locations that will minimize the chance of breakage and splashing.
Label all containers.
Keep all containers and trays closed or covered when not in use to prevent the release of toxic gases.
Do not wash any chemicals down the sink (exceptions noted below).
All spent chemicals should be placed into an appropriate waste container. A container the same as the one the chemical was originally shipped in is best.

6. Science - Equipment and resources

6.1 Fume cupboards

The *COSHH Regulations* require the regular testing of fume cupboards (maximum interval 14 months) with a quick check before use. Testing normally takes place each year in July. Mrs G Levins or Mrs A Goddard the Science Technicians have the function of seeing that this happens. The Science department arranges a contract with a company who will be allowed access to carry out the tests using a suitable air-flow meter and equipment for testing filter saturation using the procedure detailed in [CLEAPSS guide G9 (available on the CLEAPSS web site)] / The records of the tests are available for staff reference and for inspection by the employer's representative or an HSE Inspector in the *Safety Check File* / kept by Mrs G Levins and Mrs A Goddard, the Science Technicians.

All users have been trained to carry out a quick check that a fume cupboard is working before use.

Smoking cigarettes is not permitted in the school. However, **demonstrations of a 'smoking machine' are permitted in fume cupboards in designated laboratories**. The following laboratories fitted with efficient fume cupboards, or in which an efficient mobile fume cupboard could be used, are so designated: Ducted Fume cupboards in Rooms 3 and 4, and the mobile fume cupboard for Rooms 32 and 33.

6.2 Electrical testing

To meet the requirements of the *Electricity at Work Regulations*, this employer requires portable electrical equipment to be inspected and tested regularly, Mrs. G Levins and Mrs A Goddard the Science Technicians have the function of seeing that this happens within the science department. Testing normally takes place each year in July and is arranged by Mr J Clark, the Site Manager.

All users have been trained to carry out a quick visual inspection before using mains-powered equipment.

6.3 Radioactive sources

NOTE: Grays Convent High School currently has no radioactive sources.

6.4 Pressure vessels

Autoclaves, pressure cookers and model steam engines need periodic inspection under the *Pressure Systems Safety Regulations*. Inspection normally takes place each year in July/August.

6.5 Animals, plants and microorganisms in schools

The hazards associated with the use of animals, plants and microorganisms are discussed in the texts listed in section 5, which also give advice on controlling them.

6.6 Equipment safety

All staff selecting equipment for purchase will check that it is safe and suitable for the intended purpose (to comply with the *Provision and Use of Work Equipment Regulations*). Equipment listed by specialist educational equipment suppliers is taken to meet these *Regulations* but all other equipment, especially gifts, is treated with caution and carefully assessed. Advice on safety and suitability is sought from [CLEAPSS] / [the local authority [health & safety] / [science] adviser] through publications and directly.

Equipment restricted to those users who have received special training (see section 4, *Training*) is given warnings in texts in daily use.

Any user who discovers a hazardous defect in an item of equipment must report it to Mrs G Levins or Mrs A Goddard the Science Technicians / Mrs K Bialek, Head of Science.

6.7 Personal protective equipment

The employer accepts the duty to provide eye protection, gloves and laboratory coats for employees where the risk assessment requires them (*Personal Protective Equipment at Work Regulations*) Laboratory coats are supplied by the employer with the responsibility for laundering that of the employee (as is the cost of laundering claimed against income tax).

The employer expects eye protection to be available for students and visitors. Safety spectacles are provided for general use, with a set of goggles or face shields used whenever the risk assessment requires them. Goggles or face shields to chemical-splash standard are worn whenever there is a risk to the eyes. The condition of the eye protection is checked regularly (see section 3.3, *Monitoring and checking*).

6.8 Chemicals

Offers of gifts of chemicals are viewed with extreme caution to ensure that stocks are not increased unduly and that no unwanted chemicals are included.

The task of arranging safe storage of chemicals (and, where necessary, disposal), including highly-flammable liquids, in accordance with the requirements of the *Dangerous Substances and Explosive Atmospheres Regulations (DSEAR)* is given to Mrs G Levins and Mrs A Goddard the Science Technicians / Mrs K Bialek, Head of Science who will ensure that chemicals are stored securely, the risks of fire, explosion and spillage are minimised, labels are readable and that a spill kit is available and properly replenished.

Hazardous activities involving chemicals restricted to those who have received special training (see section 4, *Training*) are identified in the texts in daily use as part of the risk assessment (see section 5, *Risk assessments*).

6.9 Waste disposal

Waste chemicals and equipment are disposed of in an environmentally responsible manner in accordance with relevant legislation. Chemical disposal follows guidance on CLEAPSS *Hazcards*. Other disposal follows relevant CLEAPSS guidance.

6 Equipment and resources in the Art/Design/Technology department

COSHH at Design and Technology Department

- Potentially dangerous substances are often used in the design and technology (D&T) workshops.
- These include solvent-based varnishes, glues, and paints. All hazardous substances must be kept locked in COSHH compliant specially designed storage unit within the DT storeroom. Pupils must have no way of accessing them unless supervised.
- Additionally, sanding, soldering, or other essential fabrication processes can produce harmful fumes and dust. Therefore, all DT staff and students must use appropriate PPE.
- Design and technology teachers are likely to be exposed to harmful substances most days. Therefore, it is essential that they are both protected and educated around the long-term health risks associated with prolonged and repeated exposure.
- CLEAPSS model risk assessments will be used to understand the risks associated with all harmful substances present in the department and necessary precautions to be taken.
- The use of safety goggles, visors, and providing ample ventilation can all help to mitigate risk in a D&T classroom environment.
- All teachers and supply staff must be fully trained on what action to take in the event of an accident or emergency in the D&T workshop.
- It is vital that all pupils and staff understand the meaning of all COSHH symbols, which must be clearly present on the packaging of all hazardous substances.
- How to do COSHH risk assessments

This section is based on HSE guidance:

- 'What is a substance hazardous to health?'
- Working with substances hazardous to health
- A step-by-step guide to COSHH assessment

Consider all the relevant substances

To help make sure you consider everything:

- Find out what substances are coming into the school and where they are used, worked on, handled or stored
- Think about what substances might be produced during any process as intermediates, by-products or finished products, or what might be given off as waste, fumes, dust, etc.
- Think about what might be transported, collected, poured, weighed, packed, discharged or disposed of
- Remember that substances are used in, or arise from, maintenance, cleaning or repair work

You will want to consider:

- Chemicals or products containing chemicals
- Gases, fumes, mists and vapours
- Dusts
- Biological agents

In the context of COSHH risk assessments, you do not need to worry about:

- Lead
- Asbestos
- Radioactive substances

That is because these are covered by their own specific legislation that will require different documents if they are present in your school, such as an asbestos management plan.
This is explained in the first HSE source above, where you can also find links to more information about lead, asbestos and radioactive substances.

Identify any hazards associated with the substances

As part of your assessments, you need to consider, where relevant:

- The hazardous properties of the substance
- Information on health effects provided by the supplier
- The level, type and duration of exposure to the substance
- The circumstances of the process, including the amount of substance involved
- Activities, such as maintenance, where there is the potential for a high level of exposure
- Any relevant workplace exposure limit or similar occupational exposure limit
- Where there will be exposure to more than one hazardous substance, the risk presented by exposure to these substances in combination
- The approved classification of any biological agent

These points are set out in the legislation above.

Think about the different forms in which a substance may be present (some can be virtually harmless in some forms but hazardous in others, e.g. a solid versus a dust or fume) and about how it might enter or contact the body, such as through:

- Inhalation
- Swallowing
- Skin
- Eyes

For every route of entry or contact you identify, consider:

- Could serious effects or death, either immediate or delayed, occur from single exposures to the substance?
- Could adverse effects or death result from repeated, even low level, exposures over a period of time?
- Could cancers occur?
- Could the substance cause sensitisation, allergic reactions or asthma?
- Could the substance cause dermatitis?
- Could the substance be harmful to the human reproductive process?
- In the case of microorganisms, could they cause infection or could an infected individual infect others?

To find out more about the substances you could:

- Check any information that came with the product, such as a safety data sheet
- Ask the supplier, sales representative or relevant trade association
- Look in the relevant trade press for health and safety information
- Do some internet research, for example look at HSE's education section

Identify appropriate measures
Think about who could be exposed to the hazards and how, when deciding on measures.

Consider their working practices, and note any differences between people in a group (e.g. younger pupils vs older pupils, or pupils with challenging behaviour).

Work through this list and see which measures you could apply:

1. Eliminate the use of a harmful substance and use a safer one
2. Use a safer form of the product (e.g. paste rather than powder)
3. Change the process to emit less of the substance
4. Enclose the process so the product doesn't escape
5. Extract emissions of the substance near the source
6. Have as few people in harm's way as possible
7. Provide personal protective equipment (PPE), like gloves or coveralls, that fit the wearer

For more specific control measures:

- Look at the example control measures on page 5 of this HSE guide
- If you have a safety data sheet, use HSE's COSHH e-tool to direct you to appropriate guidance
- Use a service like CLEAPSS HazCards (this is a paid membership service and its inclusion in this article isn't an endorsement by The Key)
- Read through the example COSHH risk assessments from the HSE, some of which may be relevant to you

Under the legislation, your assessments must consider:

- The effect of the preventive and control measures you have or will put in place
- The results of any health surveillance or monitoring of exposure (you probably won't need to do these in a school environment, but check with your LA/trust/health and safety advisor)

7. Activities and procedures

7.1 Outdoor activities

When planning any field trips etc., staff consult one or more of the following the employer's code of practice / CLEAPSS *Laboratory Handbook*

7.2 Manual handling and working at height

All regular operations involving lifting or carrying equipment, pushing trolleys, etc. will be assessed to see if any may give rise to risks of injury (*Manual Handling Operations Regulations*) by a team led by the Head of Department. As it is sometimes necessary to carry chemicals or equipment through heavy fire doors, we have assessed risks under both the *Manual Handling Operations Regulations* and under the *Regulatory*

Reform (Fire Safety) Order and will consider that the risk of manual handling injury is greater than the risk of fire injury, therefore, we will prop open the fire door using wedges or weights/props. We will endeavour to keep the fire door closed as much as possible by removing the prop as soon as practicable.

Occasional (i.e., one-off) manual-handling operations will be assessed by the staff member(s) before attempting them. Problems will be reported to the Head of Department or the Health and Safety Officer, Mr. P. O'Hanlon.

Following risk assessments under the *Work at Height Regulations*, when it is impossible to avoid storage or display above head height, glass or other fragile items are never stored above head height and only lightweight and rarely used items are stored there. When displaying items at high level or fetching or replacing items stored at high level, stepladders or kick stools are used, staff never climb onto laboratory stools or benches.

7.3 Concern for others

All areas are made safe for cleaners or contractors to work in before these persons are allowed to proceed.

8. Emergency procedures

8.1 Fire

Staff will follow the normal school procedures in case of major fires. All science staff are trained to deal with minor bench fires, clothing fires and hair fires. All D&T staff are trained to deal with minor fires. This training is supported by regular drills. All school staff are regularly trained on fire safety.

Advice on firefighting is given in sections 4 of the CLEAPSS *Laboratory Handbook*].

8.2 Spills

Trivial spills are dealt with using damp cloths or paper towels. Spills of any amount which do not give rise to significant quantities of toxic or highly flammable fumes ('minor spills') are dealt with by teachers alternatively, technical staff using a 'spill kit' prepared for this purpose in accordance with section 7 of the CLEAPSS *Laboratory Handbook*. Spill kits are kept in each Laboratory.

Major spills are those involving the escape of toxic gases and vapours or of flammable gases and vapours in significant concentrations. (Small amounts can be 'major spills' if spilt in small rooms.) Staff are trained in the appropriate procedures, which may involve calling the Fire and Rescue Service. This training is supported by regular whole school drills arranged by the Mr P O'Hanlon, The Health & Safety Officer.

8.3 Injury

Science staff will follow the normal school procedures in cases that require first aid. Science staff are trained to carry out immediate remedial measures (e.g., eye rinsing), while waiting for first aiders, after accidents which occur in science. See the most recent edition of the CLEAPSS *Laboratory Handbook* section 5. Instructions for immediate remedial measures are posted on the walls of all laboratories and prep rooms.

D&T staff will follow the normal school procedures in cases that require first aid. D&T staff are trained to carry out immediate remedial measures while waiting for first aiders, after accidents, which occur in design and technology. Instructions for immediate remedial measures are posted on the walls of the D&T room.

See section 4 for the name of the person responsible for coordinating training in immediate remedial measures.

8.4 Reporting procedures

Injuries or suspected injuries to a pupil or a member of staff, dangerous occurrences and instances of damage or theft will be reported using the standard school procedures. Following an injury, so that the Regulations (*RIDDOR*) can be complied with, the accident must be reported to the Head of Department and Mr P O'Hanlon, Health & Safety Officer and a report form must be completed returned to Mr P O'Hanlon as quickly as possible.

Dangerous situations and incidents which might have resulted in injury ('near-misses') should be reported to the Head of Department in writing / recorded in the file kept in the Prep Room / D&T office and a copy given to Mr P O Hanlon, the Health & Safety Officer. These will be analysed and discussed at departmental meetings.

9. Science Laboratory rules for students

The rules for students during science lessons are as follows.

Laboratory Rules

The biggest danger in the lab is ***YOU!*** You are at risk when you don't understand the hazards or you are careless, or both. The person most likely to suffer from your mistakes is ***YOU!*** Report any accident or breakage to your teacher.

1. Only enter a lab when told to do so by a teacher. Never rush about or throw things in the lab. Keep your bench and floor area clear, with bags and coats well out of the way.
2. Follow instructions precisely; check bottle labels carefully and keep tops on bottles except when pouring liquids from them; only touch or use equipment and materials when told to do so by a teacher; never remove anything from the lab without permission.
3. Wear eye protection when told to do so and keep it on from the very start until all practical work is finished and cleared away.
4. When using naked flames (e.g., Bunsen or spirit burners or candles), make sure that ties, hair, baggy clothing etc. are tied back or tucked away.
5. Always stand up when working with hazardous substances or when heating things so you can quickly move out of the way if you need to.
6. Never taste anything or put anything in your mouth in the laboratory. If you get something in your mouth, spit it out at once and wash your mouth out with lots of water. Tell your teacher.
7. Always wash your hands carefully after handling chemicals, microbes or animal and plant material.
8. If you are burnt or a chemical splashes on your skin, wash the affected part at once with lots of water. Tell your teacher.
9. Never put waste solids in the sink. Put them in the bin unless your teacher instructs you otherwise.
10. Wipe up all small spills and report bigger ones to your teacher.

9 - Design and Technology Room Rules for Students

The rules for students during D&T lessons are as follows:

- Only enter a D&T room when told to do so by a teacher. Never rush about or throw things in a D&T room. Keep your work area and floor area clear, with bags and coats well out of the way. (Use bag storage cupboard and pegs outside room 31)
- Follow instructions precisely; only touch or use tools, equipment, machines and materials when told to do so by a teacher; never remove anything from any D&T room without permission.
- Horseplay and any unruly or inattentive behaviour of any kind will not be tolerated at any time in the workshops. Those not willing to comply with this set of rules will be asked to leave the room immediately for the safety of themselves and others.
- Machines, tools and equipment must be used in the correct manner and never misused.
- Overalls or aprons must be worn in the correct manner at all times, i.e. fastened correctly.
- Protective goggles must be worn in the workshops whenever there is any risk whilst working to the eyes.
- Students MUST always walk around the Technology Room with caution when carrying materials or tools or projects.
- All sharp objects (e.g. pencils, screwdrivers, scribers and sharp materials) and any other tools MUST be carried with points facing down.
- When operating machinery, loose jewellery (necklaces, earrings, bracelets, rings, watches, etc.) must be removed or made safe.
- Long hair must be restrained (either tied back or pinned back) at all times.
- Machines must not be left unattended at any time during operation.
- Machinery is to be operated by only one person at a time.
- Protective guarding must be used if fitted to a machine.
- The operator's attention must not be distracted whilst the machine is in operation.
- Do not lean on the machines whether in use or not.

- After use, all tools must be stored in the correct location or returned to the storeroom.
- Machines, equipment and associated areas must be cleaned correctly after use.
- When a machine or piece of equipment is operational, never attempt to touch any of the moving parts.
- In an emergency, power should be switched off first. Never touch swarf (even if the machine is not operational) without wearing gloves.
- All spillages must be attended to and cleared immediately.
- All breakages/damage must be reported immediately.
- Exhaust/dust/fume extractors must be used at all times when appropriate.

10. Staff roles and Emergency contacts

Staff roles and/or emergency contacts updated on: 9/7/21	
Advice on health & safety and all aspects of practical science generally	CLEAPSS ***Helpline*** 01895 251496. Email: science@cleapss.org.uk
Overseeing health and safety in this school	Mr P O'Hanlon Extn. 253
Science Technicians	Prep office Extn. 254 Chemistry Prep Extn. 229
D&T specialist for consultation over health and safety matters in Resistant materials	Mr Y Kocaman Room 31
D&T specialist for consultation over health and safety matters in Food technology	Miss Caruana Room 30
D&T specialist for consultation over health and safety matters in Textiles	Miss Caruana Room 30
Art / photography specialist for consultation over health and safety matters in Art / Photography	TBC

Emergency contacts

Emergency advice CLEAPSS can provide support and guidance with all of these situations.	CLEAPSS ***Helpline*** 01895 251496
Serious accident: Ambulance service	999
Serious accident: School first-aiders	Mr J Clark Extn. 246 / Mrs S Brown Extn 235 / Mrs C Smith Extn. 232 / Mrs S Byrne Extn. 248
Serious accident: School health & safety officer	Mr P O'Hanlon Extn. 253
Serious chemical theft: Police or Police anti-terrorist hotline	999 or 0800 789 321
Major chemical spill: Fire & Rescue Service Chemical Incident Unit	999
Gas leak: Gas company	!f mains gas call 0800 111 999

Summary of subject guidelines for staff – Science

All teachers, technicians and support staff

1. Teachers and technicians have a general duty to take reasonable care for the health and safety of themselves, of other members of staff and of pupils. They have specific duties: to be familiar with this health and safety policy, its updates, the texts to which it refers and any Appendices. They must cooperate with the employer's instructions, observe the requirements of this policy and fulfil any special responsibilities it gives them. They must cooperate with colleagues in their specific health & safety duties. They have a duty to report to local management any failure of equipment that has a health & safety function.
2. Staff practice must set a good example to pupils and be consistent with pupil laboratory rules, eg, over the wearing of eye protection.
3. Staff must be familiar with emergency drills and with the location in each science room of: the escape route; fire-fighting equipment; the eyewash station; the main gas cock; the main electricity switch and the nearest spill kit.
4. Laboratories must be left safe. Special arrangements must be made for equipment, which has to be left running overnight and hazardous equipment, which has to be left out. In general, all gas taps should be completely turned off and all mains-operated apparatus switched off. [At the end of the day, if practicable, gas should also be turned off at the laboratory main gas cock and electricity at the laboratory main switch.]
5. Eating, drinking and the application of cosmetics must not take place in laboratories, storage areas or preparation rooms. Pupils must not be allowed to drink from water bottles.
6. When staff are alone in the science department, nothing should be done which could lead to an accident requiring remedial measures. A teacher or technician must assess risks very carefully before conducting any practical operation in such circumstances.
7. In general, pupils must not be left unsupervised in a laboratory. Staff needing to leave a class briefly must assess the risks of doing so, perhaps arranging for temporary supervision by a neighbouring member of staff. Special arrangements may be needed for senior students doing project work, depending on the hazards involved, e.g., an experienced member of staff in an adjacent room.
8. Science laboratories, preparation rooms and stores must be locked by staff when not in use. [Special arrangements must be made if access is required to a fire-escape route.] Pupils must never be allowed into preparation rooms [unless 100% supervision can be guaranteed]. [Laboratories must only be used by teachers who are not scientists for teaching or registration after they have received special training] / [or if the laboratories have been specially cleared].] Laboratories must be available for teacher-supervised club activities only by special arrangement.

Teachers

1. At the beginning of each school year, teachers must make sure that their classes have copies of the student laboratory rules [see section 10] and issue them if necessary. They should be stuck into an exercise book, work folder or similar place.
2. Teachers must enforce the student laboratory rules, reminding students of them often enough for them to be familiar. With new students, time should be spent explaining the rules, with appropriate demonstrations.
3. Lesson preparation should be adequate and include checking on risk assessments and, where necessary, the health & safety precautions required. Requisitions must not be handed in at the last minute; technicians must be given adequate time to prepare work safely. Time should be allowed for consulting more-senior colleagues where there is any doubt and to try out practicals, particularly those involving significant hazards. Teachers must only deviate from the scheme of work (for which the activities have been checked against model risk assessments), after considering a further risk assessment, checking with a subject specialist, possibly obtaining a special risk assessment from CLEAPSS. Teachers should explain precautions to students as part of their health & safety education, [using the CLEAPSS *Student Safety Sheets*, where appropriate].

4. Open-ended investigations must be organised to allow the teacher to assess any risks and identify precautions before any hazards are met / practical work begins.
5. If, because of large class size or indiscipline, health and safety cannot be maintained during certain practical work, the work should be modified or abandoned. This decision should be reported to the [Head of Science] / [subject specialist].
6. A teacher is responsible for the health and safety of any of his/her classes taken by a trainee teacher. If the normal class teacher is absent, another science teacher must be given this responsibility by the Head of Department.
7. Teachers in charge of courses are responsible for ensuring that technicians are familiar with the appropriate precautions needed to control any hazards, which might be encountered in preparing equipment for their lessons and in clearing the equipment away. Class teachers may need to remind technicians of such warnings.

Annual checks

	Year	Eye protection		Chemical Stock List		Bunsen burners		Electrical safety testing		Fire Extinguishers		Fume Cupboards annually		Pressure cooker and autoclave annually		Model steam engine annual	
		Sign	Date	Sign	Date	Sign	Date	Sign	Date	Sign	Date	Sign	Date	Sign	Date	Sign	Date
	2021																
	2022																
	2023																
	2024																
	2025																
Shaded area: checks by outside contractors																	

TERMLY CHECKS					
	END OF TERM (Dec/Feb/July)				
Room	**2**	**3**	**4**	**32**	**33**
Fire extinguisher in place					
Fire blanket in place					
Fire - Instruction sign					
Fire - Evacuation route sign					
Chemical spills kit (check contents)					
Immediate Remedial Measures notice					
Eye-wash tubing					
Eye-wash sign					
Minimum 32 safety spectacles clean and in good repair					
Safety rules notice					
Soap					
Paper towels					
Dustpan and brush					
Stools: remove broken ones					
Power sockets and lights - not working					
Sinks and taps - clear and working, no leaking					
Report any unsafe faults to site manager					
Date checked……..…..			**Checked by…….……..**		

Notes:

SAFETY IN SCIENCE

We would like to raise awareness of safety in science by bringing to your attention some documents that you may have or may not have seen before.

Health and safety at work act 1974

As mentioned in the health and safety at work act it is important that you observe a risk assessment before starting any activity, please remember an experiment that is suitable for one class might not necessarily be suitable for another.
Unfamiliar practicals can always be practiced before the lesson.

Where printed risk assessments can be found.

- At Grays Convent we use CLEAPSS as our main source of information and both Prep rooms carry the HAZCARD system as well as a reliable and informative hand book, this is also available online at https://www.cleapss.org.uk/
- COSHH Regulations: https://www.hse.gov.uk/

Hazcards are provided with your lesson where necessary (please familiarise yourself with them before starting the lesson). Hazcards are updated continually the information you remember from last month may have changed.

IF YOU DO NOT FOLLOW A RISK ASSESSMENT AND AN ACCIDENT OCCURS, YOU COULD BE HELD LIABLE.

REMEDIAL MEASURES

If safety procedures are carried out correctly, the need for remedial measures is minimal. Please ask the class if anyone is asthmatic, they may need to be seated at the back of the class during some experiments (see hazcards). If in doubt as to whether you have an asthmatic in the class please check SIMS records. Pupils should be asked to wash their hands after using chemicals this is good practice and is required after using some chemicals see hazards.

Chemical splashes in the eye

In every laboratory there is a piece of rubber in a plastic bag fixed to your wall near a sink (please familiarise yourself with its position). It is extremely important that an eyewash is administered immediately especially in the case of alkalis. In fact, in the case of alkalis irrigation of the eye should be constant and continue during the journey to hospital.

The eye should be irrigated for at least ten minutes.

Whilst irrigating the eye please send a pupil to the prep room or Reception if no one available, there is a list of first aiders on the wall in each prep room next to the phone.

Remember to wear your own safety spectacles when necessary as this helps to set a good example to pupils.

Chemical splashes on the skin

See enclosed sheet and sheet on wall as to how to deal with chemical splashes. Please do not send pupil to the prep room, implement remedial measures, send for first aid, and have appropriate hazcards ready.

Burns
Cool under running water and call for first aid (area must be cooled under running water **for at least 10 minutes**). Do not send pupils to the prep room with burns, **they must be cooled immediately.**

Chemicals in the mouth, perhaps swallowed
Do no more than wash out the pupil's mouth and call for first aid having the appropriate hazard ready.

Toxic gas (e.g. Chlorine or sulphur dioxide)
Remove from the class and sit the pupil down in the fresh air, call a first aider.

Hair on fire
Smother with the fire blanket (there is a fire blanket on the wall in each laboratory please familiarise yourself with its position).
Call for first aid and ambulance.

Clothing on fire
Smother by the pushing pupil to the ground and roll, using a fire blanket to smother flames. Call for first aid and ambulance.

Electric shock
There is an emergency electrical cut-off board on the wall in each Laboratory. Try to remove any electrical equipment if still in contact with pupil using a non-conducting item (wooden ruler, fire blanket) call for first aid and ambulance.

Bad cuts
Apply pressure to wound and elevate if possible. Call for first aid and ambulance if necessary.

Asthma attacks
Ensure that the pupil has immediate access to her medication and permit her to carry out the appropriate steps for using it. If prolonged, over a minute or two call for first aider.

Have hazards ready in case of accident

Remember to use lowest molarity possible
(COSHH Regulations)

Please remember to fill in an accident form

Chemical Spill Kits

There is a chemical spill kit in every laboratory please familiarise yourself with its position and contents.
If in need of assistance when clearing a spill, please call the Science Technicians.

Do not attempt to clean up a spill without consulting the hazard.

PLEASE SEE CARETAKERS FOR WET FLOOR SIGNS IF YOUR FLOOR IS WET AND COULD POSSIBLY BE SLIPPERY.

If you would like training in any of the above please see the Science Technicians to arrange.

Summary of subject guidelines for staff – Art / Design / Technology

MACHINE MAINTENANCE CHECKS TIMETABLE

DISC SANDING MACHINES

Daily Checks

- Clean any dust not removed by the extraction system.
- Check condition of sanding belt/disc and replace if torn/worn.
- Check fit of sanding table to disc (it should be as close as possible, normally no greater than 2 mm).
- Check that quadrant guard is in the correct position.

Weekly Checks

- Clean filters in dust-extraction system, if fitted. Empty dust-collection tray/bag if fitted.
- Visually check condition of electrical switches, conduit, cable, etc.
- Lubricate if necessary.

Termly Checks

- Check condition of motor, drive system and drive belts, if fitted. Replace if worn.
- Lubricate if necessary.
- Check operation of dust-extraction system. Check bearings for wear.

DRILLING MACHINE

Daily Checks

- Check that the chuck guard is clean, functions correctly and is not cracked/broken.
- Make sure that the guard over the driving belt fits correctly and that the interlock or securing device is in place and working correctly.

Weekly Checks

- Make sure that the chuck key fits correctly and is not worn.
- Visually check condition of electrical switches, conduit, cable, etc.
- Lubricate if necessary.
- Make sure that the drill head clamping bolts are tight and the head-locking ring is in place.
- Make sure that the table clamp functions correctly.
- Check condition of drill bits. Sharpen as required. Replace twist drills that have worn shanks.
- If wooden blocks are used under the work piece, replace those that are worn.

Termly Checks

- Check condition of motor, drive system and drive belts. Replace if worn.
- Lubricate if necessary. Machines with gears running in an oil bath should have the oil level checked.
- Check bearings for wear.
- Check that machine vices and hand vices function correctly and are not worn or clogged with waste materials.

SCROLL SAWS

Daily Checks

- Clean any dust not removed by the extraction system.
- Check condition of blade and replace if blunt.
- Check that blade guard is correctly set.

Weekly Checks

- Clean filters in dust-extraction system, if fitted.

- Empty dust-collection tray/bag, if fitted.
- Visually check condition of electrical switches, conduit, cable, etc.
- Lubricate if necessary.

Termly Checks
- Check condition of motor, drive system and drive belts, if fitted. Replace if worn.
- Lubricate if necessary.
- Check operation of dust-extraction system.

3D PRINTER

Weekly checks
- Check power supply cable.
- Check work table and remove debris/waste material.
- Visually check condition of electrical switches, conduit, cable, etc.
- Clean viewing panel(s).

Termly Checks
- Check cooling/venting/extraction operation.
- Check filters (if fitted).
- Check table bearings, drive mechanism operation and lubricate.

BAND SAW

Daily Checks
- Clean any dust not removed by the extraction system.
- Check condition of blade; replace if blunt or if welded joint on blade is suspect.
- Check that blade guard is correctly set.
- Check that machine braking system functions correctly.

Weekly Checks
- Clean filters in dust-extraction system, if fitted.
- Empty dust-collection tray/bag, if fitted.
- Visually check condition of electrical switches, conduit, cable, etc.
- If fitted, check fit of table insert to blade and replace if required; (the gap between the insert and the blade should be no greater than 4 mm).
- Check blade guide, thrust wheel for wear and adjust/replace as required.
- Check tracking setting and condition of rubber tyres on blade wheels, if fitted. Replace if required.
- Lubricate if necessary.

Termly Checks
- Check condition of motor, drive system and drive belts, if fitted. Replace if worn.
- Lubricate if necessary.
- Check operation of dust-extraction system.
- Check bearings and blade guards for wear and replace if necessary.

PLASTIC FORMING MACHINE (vacuum former, line bender, strip heater)

Weekly checks
- Check power supply cable.
- Check castors and brakes.
- Visually check condition of electrical switches, conduit, cable, etc.

Termly Checks

- Check seals/rubbers.
- Check vacuum pump operation.
- Check heating element(s) operation
- Clean debris from cavity and platen surface.
- School D&T Department
- EQUIPMENT REGISTER AND MAINTENANCE LOG
- Type of equipment ……Serial No. ……. Location …… Make …….
- If electrical, details of phase/ power, etc……

DATE OF SERVICE AND INSPECTION	REPAIR/SERVICING WORK REQUIRED/CARRIED OUT AND REMARKS	SIGNATURE OF PERSON CARRYING OUT SERVICE/ INSPECTION	DATE WORK WAS DONE	SIGNATURE OF PERSON CARRYING OUT WORK REQUIRED

RESTRICTED EQUIPMENT

Under no circumstances should staff or pupils be allowed to operate the equipment listed below unless they have undergone suitable specialist training.

- Band Saw
- Pillar Drill
- Scroll/Fret Saws
- Disc Sander
- Vacuum Former
- 3D Printer
- Table Router
- Portable Router
- Line Bender
- Hot wire cutter