

OCKBROOK SCIENCE DEPARTMENT
PRACTICAL SCIENCE DURING COVID 19 RISK ASSESSMENT

DATE: 06/09/2020

NAME OF RISK ASSESSOR : Emma Marsh

SIGNATURE _____Emma Marsh_____

POSITION : Head of Science

This risk assessment must be read in conjunction with:

1. Ockbrook School RA-Reopening for Senior School September 2020, Part 3
2. Appendix A Teaching Staff Procedures for carrying out Practical Science during Covid-19 school reopening.
3. Appendix B Teaching Staff Procedure for cleaning labs at the end of lessons prior to a new bubble using the lab.
4. Appendix C Top 10 Tips for staying safe in Science.

SIGNIFICANT HAZARD(S)	PEOPLE AT RISK AND HOW?	LEVEL OF Covid 19 Spread RISK	CONTROL MEASURES TO REDUCE RISK	RISK RATING	Review date/Revision to control measures
Queuing outside laboratories at start of lesson	Pupils and staff	High	<ul style="list-style-type: none"> • Social distancing of 2m at all times between staff and students. • Social distancing of 1m, wherever possible between students. • Corridor/stairs marked with safe waiting spaces 1m apart. • Each waiting space numbered 1-24 with 1 furthest from lab door. • Copy of lab seating plan showing positions of workstations and maximum 	Low	

			<p>number of pupils displayed on lab door and in waiting area.</p> <ul style="list-style-type: none"> • Close supervision of pupils whilst waiting 		
Entry into laboratories	Pupils and staff	High	<ul style="list-style-type: none"> • Pupils enter lab individually, following the directions of teacher and make way to numbered (1-24) workstation. • Social distancing of 2m at all times between staff and students. • Social distancing of 1m, wherever possible between students. 	Low	
Whilst inside the lab	Pupils and staff	High	<ul style="list-style-type: none"> • The lab is to be cleaned at the end of each lesson where there is to be a change of “bubble” when the lab is next used. • Cleaning is to be carried out by the teacher based in the lab following the cleaning schedule detailed in Appendix B (3). • Clear guidance given by class teachers on a regular basis to students in relation to Covid-safe practices in the lab, as per Appendix C (4), and a hard copy of the procedure placed on a lab notice board. • Workstations numbered 1-24, 1 being furthest from the entry point and 24 being closest to the 	Low	

			<p>entry point.</p> <ul style="list-style-type: none"> • Where possible workstations will allow students to sit side by side and face forwards. • Safe routes to access sinks, fume cupboard and (emergency) exit. Teacher to ensure safe routes understood by students at beginning of session. • Social distancing of 2m at all times between staff and students. • Social distancing of 1m, wherever possible between students. 		
Emergency whilst inside the lab	Pupils and staff	High	<ul style="list-style-type: none"> • Pupils follow safe route at 1m separation to exit the lab when instructed to do so. • Pupils wait at numbered space for further instructions from teacher. • Social distancing of 2m at all times between staff and students. • Social distancing of 1m, wherever possible between students. 	Low	
Casualty as a result of emergency inside the lab,	Pupils and staff	High	<ul style="list-style-type: none"> • Use the IRM (immediate remedial measures) kit marked "For emergency use only" • Wear PPE properly and take 	Low	

			<ul style="list-style-type: none"> care when removing. Wash hands immediately and thoroughly after removing PPE. 		
Carrying out practical work	Pupils and staff	High	<ul style="list-style-type: none"> Procedure for carrying out Practical Science during Covid 19 school reopening (Appendix A) (2) must be followed. 	Low	
Carrying out the following activities: Cheek cell sampling Lung volume/capacity and other breathing based activities Activities using Saliva Activities which make use of straws or musical instruments for blowing through	Pupils and staff	High	<ul style="list-style-type: none"> These activities must not be carried out. 	Low	
Cleaning hands with alcohol-based hand gels which provide a fire risk.	Pupils and staff	High	<ul style="list-style-type: none"> Alcohol free hand sanitiser and soap used instead. Alcohol-based hand gels are available in the corridor, outside each lab. 	Low	
Clearing up practical equipment	Technician and Staff	High	<ul style="list-style-type: none"> Procedure for carrying out Practical Science during Covid-19 school reopening (Appendix A) (2) must be followed. 		
Access of prep room	Staff	High	<ul style="list-style-type: none"> No pupil access to prep room. All control measures relating to shared staff spaces (1) to be followed. 	Low	

			<ul style="list-style-type: none"> • First aid kit must be used only if disposable gloves worn. 		
Broken glassware	Pupils, staff and maintenance team	High	<ul style="list-style-type: none"> • Pupils given careful instruction regarding use. • Broken glassware put in designated bucket, following social distancing of 1m at all times between students, 2m between staff and students. • Broken glass to be removed to prep room and left in labelled container for 72 hours before disposal of by maintenance team. 		
Bunsen burners	Pupils and staff	Medium	<ul style="list-style-type: none"> • Single use lab coats worn during use, to be removed to labelled container in prep room then sent to laundry for cleaning. • Safety spectacles worn during use and placed in sterilising fluid container after use. • When unattended, safety flame used. • All burners serviced regularly by lab technician. 	Low	
Sharing of lab coats	Pupils	Medium	<ul style="list-style-type: none"> • Lab coats are not considered PPE but are often worn to protect clothing. • Lab coats must not be shared. 	Low	

			<ul style="list-style-type: none"> • Y12/13 students to be issued with named lab coat which will be stored on lab pegs where used. • If required, KS3/KS4 will be provided with a disposable apron, which will be collected and quarantined for 72 hours before being disposed of or a single use lab coat which must be removed and quarantined for 72 hours before sending to the laundry to be washed, after each use. 		
Mercury thermometers	Pupils and staff	Medium	<ul style="list-style-type: none"> • Spillage kit available when needed. To be used by staff only. • Emergency whilst inside the lab control measure followed. 	Low	
Electrical equipment e.g. t.v, video, OHP	Pupils and Staff	High	<ul style="list-style-type: none"> • Plugs/sockets wiped with antibacterial wipe. • Appliances switched off after use and unplugged at end of day. No trailing leads. 	Low	
Physical environment of lab	Pupils and staff	High	<ul style="list-style-type: none"> • Bags/coats under workstation. • Blinds can be used to vary light intensity. Cord must be wiped down with antibacterial wipe before and after use. • Windows and doors should be kept open as much as possible to 	Low	

			<p>ensure as much ventilation as possible. Handles must be wiped down with antibacterial wipes before and after use.</p> <ul style="list-style-type: none">• Cupboard and draw handles must be wiped down with antibacterial wipes before and after use.• Smartboard/whiteboard/computer/projector can be used when necessary provided it is wiped down with antibacterial wipe before and after use.		
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References

- **CLEAPPS, GL343 Guide to doing practical work during the Covid-19 pandemic – Science-Version 2.01-10/08/20**

Appendix A

Teaching Staff Procedures for carrying out Practical Science during Covid-19 school reopening.

a) General points

- Each practical should be Risk Assessed prior to the practical session, taking into account the competency of the pupils to carry out the task, then considered in terms of the Covid-19 RA.
- Practical sessions may take longer than normal to complete so this must be considered in your planning.
- Long and complex multi-step practicals should be avoided.
- Students can work individually or in small groups, as per pre-lockdown but where possible should be at a distance of 1m from each other.
- Where the teacher becomes concerned that it is not possible to maintain social distancing during a practical activity they must stop the practical work and allow pupils to work on theory tasks instead.
- Students and staff must wash hands before and after using practical equipment.
- Pupils must use their own pens/pencils etc. Where staff need to provide this equipment it should be given, not loaned.
- Equipment can be shared between pupils within the same bubble, in different classes. E.g. Y7 and Y9 pupils can use the same Bunsen burners in different lessons but Y11 would need a different set of Bunsen burners as they are in a different bubble. These could be stored to be used by Y11 on a different day.
- Staff will need a separate set of equipment for demonstrations or for showing the class how to carry out a practical activity. This equipment must not be shared with the rest of the class.
- A bucket should be available in each lab for accidentally broken equipment and this should be removed at the end of each session to the prep. room by the teacher/technician. The usual designated lidded glass buckets should not be used.
- The wearing of PPE is optional in schools, for both staff and students. Full face visor guards and face masks will be issued to each member of science staff to use if desired.
- An IRM (immediate remedial measures) kit will be available in each lab, labelled for emergency use only, and containing disposable gloves, a fluid resistant face mask, disposable plastic apron, and disposable eye protection (face shield, safety specs or goggles, plastic bags for the disposal of used equipment and for ant contaminated clothing.

b) Subject specific points

- For practicals which require the use of a fume cupboard the 1m social distancing rule will still apply and the lab spacing layout will need to be adjusted to take account of this.
- Microscope eye pieces should be wiped with a non-alcohol based sanitiser wipe before AND after use by the user.
- Cheek cell sampling, lung volume/capacity and other breathing based activities, activities using Saliva and activities involving blowing into straws or musical instruments are NOT allowed.
- Safety glasses and goggles will need sanitising before and after every use by fully immersing in sterilising solution then allowing to air dry. A washing up bowl of sterilising solution must be available in a suitable position in the lab for students to place their eye protection in as they leave.
- Pupils should be reminded to wash hands before putting on eye protection.
- A new lab coat, if required, must be included with the practical equipment at the start of the lesson and cleared to the prep room, for washing by the school laundry, after each lesson.
- Chemicals spilt on the skin should be washed off with plenty of water as normal and NOT with hand sanitiser.

c) Procedure for quarantining/ meticulously cleaning equipment at end of lesson

- Ensure students place equipment in correct designated bubble area in the lab. i.e. labelled KS3/KS4/KS5
- Cover the equipment with plastic sheet provided and complete one of two labels:
Red label – if equipment is required again.
Green label – if equipment is finished with.
- Before being used by a different “bubble”, the equipment will either be stored in the designated quarantine area for 72 hours or “meticulously cleaned”, following the guidance detailed in **CLEAPPS, GL343 Guide to doing practical work during the Covid-19 pandemic – Science-Version 2.01-10/08/20**
- To aid the technician to plan for when the equipment is needed again, teaching staff are encouraged to complete an equipment requisition sheet for a full week and hand to the technician as early as possible.
- Priority over equipment clashes will be given to the staff member requesting equipment earliest.

Appendix B

Teaching Staff Procedure for cleaning labs at the end of lessons prior to a new bubble using the lab.

- Once all students have left the lab, wipe down ALL pupil workstation benches (including surfaces around raised sinks), plug sockets, gas taps, door handles and light switch using the cleaning products and blue-roll provided.
- Clean ALL side benches that are clear of equipment (the technician is responsible for cleaning ALL side benches on top of which equipment is situated, during the lab clearing process).
- All used blue roll to be placed in the lidded bins in the lab.

Appendix C

Top 10 Tips to stay safe in Science

- 1) Wait outside the lab, 1m apart with facemasks on and use hand gel.
- 2) Line up and enter lab in workspace order, 1-24.
- 3) Always sit in allocated workspace.
- 4) Remove masks and store safely, get out folders/pencil case etc. and place bag under bench.
- 5) Before using any practical equipment, wash hands and throw paper towels in lidded bin.
- 6) One person per pair to collect equipment when directed. **DO NOT TOUCH ANY OTHER EQUIPMENT IN THE LAB.**
- 7) Once practical work complete, return equipment, wash hands and throw paper towels in lidded bin.
- 8) If safety goggles used, wash hands before removing then place in container labelled sterilising solution.
- 9) Leave lab one row at a time, maintaining 1m distance from each other.
- 10) In corridor, apply hand gel **BEFORE** putting on face mask and exit following the one-way system.