

GENERAL SCHOOLS RISK ASSESSMENT



PART A. ASSESSMENT DETAILS:

Area/task/activity: Science lessons incorporating, electricity, forces & motion, heating & burning, plants, use of micro organisms and bringing animals into school

Location of activity: Primary School classroom

School name: Address & Contact details:	Brinscall St John's CE Methodist Primary	Name of Person(s) undertaking Assessment:	S Westwood
		Signature(s):	
Head Teacher (Name):	Linda Clayton	Date of Assessment:	Autumn term 2022
Signature:		Planned Review Date:	Autumn term 2025
How communicated to staff:	Staff meeting and email	Date communicated to staff:	

PART B1. HAZARD IDENTIFICATION AND CONTROL MEASURES:

Step 1 Identify significant hazards	Step 2 Identify who might be harmed and how	Step 3 identify precautionary measures already in place	
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List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) (Actions already taken to control the risk)
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Applicable to All

Poor housekeeping,	Pupils, staff, adult helpers	Slips/trips	<ul style="list-style-type: none"> ◆ Spillages cleaned up promptly; ◆ Walkways kept clear at all times; ◆ Pupils given clear instruction on how to handle and carry items equipment around the classroom;
Inappropriate use of equipment	Pupils, teachers, adult helpers	Various injuries	<ul style="list-style-type: none"> ◆ Close supervision of pupils; ◆ a pupil safety briefing on the particular activity are given at the beginning of each activity; ◆ only equipment appropriate for the maturity, experience and special needs of any group are used ; ◆ First Aid kit available and there is access to a First aider.
Electricity	Pupils, teachers, adult helpers	electrocution	<ul style="list-style-type: none"> ◆ Do not use hand-held mains powered fans or hairdryers when testing model boats. Ensure that any static mains powered fans cannot come into contact with the water
Materials	Pupils	Skin / eye irritation	<ul style="list-style-type: none"> ◆ iron filings are placed in a sealed bag to prevent them sticking to magnets, irritating the skin of children or entering the eye; ◆ First Aid kit available and there is access to a First aider.
Electricity			
List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) <ul style="list-style-type: none"> ◆ (Actions already taken to control the risk)
Electricity	Pupils, staff, adult helpers	Electric shock	<ul style="list-style-type: none"> ◆ CLEAPSS Guide PO17 Batteries for practical circuit work referred to by staff prior to activities; ◆ Pupils do not handle mains electricity but are taught how to plug it in and use it safely; ◆ Pupils are warned of the electrical dangers in the home; ◆ Pupils are not to poke things in to sockets; ◆ Clear distinction is made to pupils between equipment which is for general use, that which can only be used under direct supervision and that which is for adult use only. ◆ Any equipment issued is counted “out” and “in”;

Electricity continued...	Pupils, staff, adult helpers	Electric shock	<ul style="list-style-type: none"> ◆ Pupils must not take electrical equipment apart ◆ Safety briefings are given at the beginning of each activity; ◆ Only equipment appropriate for the maturity, experience and special needs of any group is used; ◆ Pupils are closely supervised during any activities involving electricity/batteries; ◆ Equipment is stored out of reach of pupils; ◆ All equipment visually inspected prior to use; by both staff & pupils ◆ Appropriate equipment purchased (bought from reputable educational supplier); ◆ Manufactures instructions are followed for any equipment; ◆ Electrical testing of all equipment is undertaken annually; ◆ Low voltage power supplies should be used by KS2 only; ◆ A First Aid kit is available and there is access to a First aider.
Heat	Pupils, staff, adult helpers, other building users	Fire, burns. Smoke inhalation, death	<ul style="list-style-type: none"> ◆ Batteries are stored so that their terminals cannot touch; ◆ Fire exits kept clear at all times; ◆ Walkways kept clear at all times; ◆ There is an evacuation procedure that is known and practiced by all school staff and pupils.
Poor housekeeping	Pupils, staff, adult helpers	Slips/trips	<ul style="list-style-type: none"> ◆ Spillages cleaned up promptly; ◆ Walkways kept clear at all times; ◆ Pupils given clear instruction on how to handle and carry items equipment around the classroom; <p>Bags & coats are kept in appropriate places.</p>
Small objects	Pupils	Swallowing, choking, pushing up nose or into ears	<ul style="list-style-type: none"> ◆ Small/tiny batteries e.g. watch batteries are not used.

Use of batteries, hazardous substances,	Pupils, staff, adult helpers	Ingestion, irritation skin	<ul style="list-style-type: none"> ◆ For investigative circuit work disposable batteries (zinc carbon or zinc chloride - <i>not</i> alkaline) are used; ◆ Rechargeable nickel/cadmium or nickel/metal hydride batteries are used for the long-term powering of motorised models where they are secured in a dedicated compartment, ◆ Wet batteries e.g. car batteries are not used; ◆ Pupils are warned not to cut open batteries, ◆ Hygiene procedures are followed; ◆ Appliances visually inspected before use to check for any leaking batteries; <p>Old batteries are disposed of following the appropriate guidelines</p>
Forces & Motion			
List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) ◆ (Actions already taken to control the risk)
Forces and motion lesson	Pupils, teachers, adult helpers	As listed within this risk assessment	<ul style="list-style-type: none"> ◆ Guidance followed in CLEAPSSPS052 Lasers. Laser devices and LEDs, PS076 Electron bean tubes and "Be Safe" published by ASE; ◆ All the equipment is counted "out" and "in"; ◆ Pupils are taught the safe use of equipment and how to make safe any experiment in case of emergency; ◆ Stretched materials are kept away from pupils eyes or eye protection worn.
Released objects, struck by	Pupils, teachers, adult helpers	Cuts lacerations, abrasions, eye damage	<ul style="list-style-type: none"> ◆ A pupil safety briefing on the particular activity are given at the beginning of each activity, including appropriate handling of equipment; ◆ Only equipment appropriate for the maturity, experience and special needs of any group are used; ◆ Close supervision when pupils are releasing objects from a height to ensure that pupils are not putting themselves or others at risk; ◆ The size and load of any pulley system are limited; ◆ A box containing soft or waste material under any hanging load is always placed under. (The load itself should be as low as possible, as should swinging weights e.g. pendulum); ◆ Large constructions are checked before use for strength and stability to ensure they are designed to support, carry or contain a child; ◆ Structures that have been tested to destruction are safely disposed of; ◆ First Aid kit available and there is access to a First aider.

Poor housekeeping	Pupils, teachers, adult helpers	Slips/trips,	<ul style="list-style-type: none"> ♦ Walkways are kept clear at all times; ♦ Spillages are cleaned up promptly; ♦ Fire exits are kept clear at all times.
Electricity	Pupils, teachers, adult helpers	electrocution	<ul style="list-style-type: none"> ♦ Hand-held mains powered fans or hairdryers must NOT be used when testing model boats. Ensure that any static mains powered fans cannot come into contact with the water.
Materials	Pupils	Skin / eye irritation	<ul style="list-style-type: none"> ♦ Iron filings are placed in a sealed bag to prevent them sticking to magnets, irritating the skin of children or entering the eye.
Small objects	Pupils	Swallowing, pushing up nose or into ears	<ul style="list-style-type: none"> ♦ Avoid using small magnets with KS1.
Heating & Burning			
List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) ♦ (Actions already taken to control the risk)
Heating & Burning Activities	Pupils, teachers, adult helpers	All below	<ul style="list-style-type: none"> ♦ Guidance followed "Be Safe" published by the <i>Association for Science Education (ASE)</i>; ♦ CLEAPS guidance P004 Safe heating for practical science and P018 Investigating burning are followed; ♦ A first aid kit is available and there is access to a First Aider.
Hot temperatures	Pupils, teachers, adult helpers	Burns	<ul style="list-style-type: none"> ♦ Candles, night lights, calorettes and small quantities of water are used as sources of heat; ♦ Mentholated spirit burners, oil stoves e.g. paraffin diesel including pressure stoves, gas burners, hot air paint strippers or solid fuels are not used; ♦ Substances are heated in metal spoons, small containers made of aluminium foil or in metal lids. If metal bottle tops are used any lining must be removed and paint or varnish burnt off; ♦ A clothes peg fixed to the end of a handles is used to hold materials in a night light flame; ♦ If test tubes are used, guidance in the "Be Safe" document is followed; ♦ Spirit-filled thermometers, liquid-crystal strips, dial types or digital types are used as they are robust and easy to use; ♦ Pupils told not to move or lift candles while lit or whilst there' is melted hot wax. Only move or dispose of when wax has cooled.

Hazardous/flammable substances	Pupils, teachers, adult helpers	Inhalation, burns	<ul style="list-style-type: none"> ◆ Methylated spirit burners, oil stoves e.g. paraffin diesel including pressure stoves, gas burners, hot air paint strippers or solid fuels are not used; ◆ Pupils are given briefing of risks involved in experiment and control measures in place; ◆ Goggles & gloves are worn if required; ◆ Area around the naked flame are kept free from combustible materials; ◆ Activities take place over a large metal tray filled with sand and kept for this purpose; ◆ Use of mercury-in-glass thermometers is avoided due to the risk of spillage and can release a little poisonous mercury vapour if broken; ◆ Solvent-based paints, adhesives or glues are not used during these activities; ◆ Small quantities of flammable substances used within the curriculum have a COSHH assessment, are stored out of reach of pupils/children and in a fire resistant cabinet; ◆ The activities are carried out in a well ventilated area; ◆ Teacher/ TA is aware of fire safety measures within school
Poor housekeeping	Pupils, teachers, adult helpers	Slips/trips, blocked fire exits,	<ul style="list-style-type: none"> ◆ Pupils are given clear instruction on how to handle and carry items of equipment around the classroom; ◆ Walkways kept clear at all times; ◆ Spillages are cleaned up promptly; ◆ Fire exits kept clear at all times; ◆ Bags & coats are kept in appropriate places.
Inappropriate use of equipment, faulty equipment,	Pupils, teachers, adult helpers	Various	<ul style="list-style-type: none"> ◆ Equipment is counted “out” and “in” and checked for faults; ◆ Pupils are taught the safe use of any equipment; ◆ Relevant safety briefing given at the beginning of each activity; ◆ Equipment used is appropriate for the maturity, experience and special needs of any group; ◆ There is good classroom management at all times; ◆ There is close supervision of pupils e.g. up to 6 pupils.
Fire	Pupils, teachers, adult helpers, all building users	Burns, smoke inhalation, death	<ul style="list-style-type: none"> ◆ Sufficient and accessible emergency exits made available; ◆ Appropriate safety signs and signals in place; ◆ Staff and pupils aware of emergency evacuation procedures; ◆ Emergency evacuation procedures tested termly.

Plants			
List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) ♦ (Actions already taken to control the risk)
All below	Pupils, teachers, adult helpers	All below	♦ Guidance followed in CLEAPSS Guide P039 Gardening and P021 Looking closely at the arts of a flower.
Hazardous plants,	Pupils, teachers, adult helpers	Poisoning, Infection, skin / eye irritation	♦ Suitable plants are used e.g. begonia, busy lizzie, coleus, fuchsia, geranium, mimosa pudica, mother of thousands, pelargonium, philodendron, piggyback plant, rubber plant, spider plant, swiss cheese plant, tradescantia; ♦ Pupils are taught not to taste any part of a plant; ♦ No poisonous or irritant plants are used.
Poor housekeeping, Slips/trips	Pupils, teachers, adult helpers	Cuts, bruises, abrasions, fractures	• Pupils are given clear instruction on how to handle and carry items equipment around the classroom; • Walkways kept clear at all times; • Spillages are cleaned up promptly; • Fire exits kept clear at all times; • Bags & coats are kept in appropriate places; • Regular workplace inspections undertaken.
Sharp edges,	Pupils, teachers, adult helpers	Cuts, lacerations	♦ Pupils taught safe use of any equipment; ♦ Pre inspection of equipment prior to use; ♦ Defective equipment put out of use.
Poor hygiene	Pupils, teachers, adult helpers	Infection, skin / eye irritation	♦ Strict hygiene procedures are followed, hands are washed after all activities ; ♦ Open wounds to be covered with waterproof dressing; ♦ Gloves are worn as and when considered appropriate.
Allergies	Pupils, teachers, adult helpers	Allergic reaction	♦ Seeds are checked to ensure they have been dressed with pesticides; ♦ Awareness of any allergies within the class group and staff are determined prior to any activities with micro organisms and arrangements modified to avoid those with allergies coming into contact; ♦ Emergency arrangements are in place for those with allergies; ♦ A first aid kit is available and there is access to a First Aider.

Use of Micro Organisms (including bacteria, fungi, algae, viruses and protozoa)			
List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) ♦ (Actions already taken to control the risk)
Use of micro organisms	Pupils, teachers, adult helpers	All below	<ul style="list-style-type: none"> ♦ Guidance followed in “Be Safe” published by <i>Association for Science Education</i>; ♦ CLEAPS Guide P006 Growing fungi on food followed; ♦ Relevant safety briefing is given at the beginning of each activity; ♦ Good classroom management is exercised; ♦ There is close supervision of pupils; ♦ Cultures are viewed in containers plastic bags that have been sealed.
Poor hygiene procedures, allergies (microbes)	Pupils, teachers, adult helpers	Infection, irritation of skin / eyes, allergic reactions	<ul style="list-style-type: none"> ♦ A first aid kit is available and there is access to a First Aider; ♦ Potentially harmful micro-organisms are not used in lessons; ♦ Microbes are grown in securely covered containers, plastic bags which are not opened; ♦ Suitable materials are used e.g. baker's yeast, milk, edible mushrooms, mouldy cheese, bread or fruit, soil, yoghurt; ♦ Awareness of any allergies within the class group and staff are determined prior to any activities with micro organisms and arrangements modified to avoid those with allergies coming into contact; ♦ Emergency arrangements are in place for those with allergies; ♦ All containers in which micro organisms are grown are securely closed (but not sealed). They are not uncovered for observation; ♦ All cultures are dated so that they are not left for extended periods of study and are not left for long periods before disposal; ♦ There is prompt disposal of anything that begins to smell; ♦ Material from dustbins or polluted water is never used for investigations on micro organisms; ♦ Pupils are instructed not to put anything in their mouths, unless of course, the microbes are in a food product such as yoghurt or bread which was made under hygienic conditions; ♦ Strict hygiene procedures for handling are followed;

(continued)			<ul style="list-style-type: none"> ◆ Benches wiped down with suitable disinfectant between experiments and at the end of lesson; ◆ Pupils should be aware of hand washing procedures; ◆ Cultures are disposed of safely sealed bags are placed in the normal waste bins.
Poor housekeeping	Pupils, teachers, adult helpers	Cuts, bruise, abrasions, fractures	<ul style="list-style-type: none"> ◆ Walkways kept clear at all times; ◆ Spillages cleaned up promptly using appropriate protection gloves; ◆ Spillages are covered by cloth or towel to stop any aerosol formation; ◆ Those with allergies are kept well away from any spillages. ◆ Bags & coats are kept in appropriate places.
Bringing animals into primary schools			
List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) (Actions already taken to control the risk)
All below:	Pupils, teachers, adult helpers	All below:	<ul style="list-style-type: none"> • Staff always refer to the CLEAPSS document PS 055 Bringing pets and other animals temporality into schools (07/2017) when organising an animal visit to school.
Phobias	Pupils, teachers, adult helpers	Stress	<ul style="list-style-type: none"> • Parents/guardians are asked to identify any pupils known to have a phobia of certain animals e.g. dogs, snakes, spiders; • Where there are pupils or staff with phobias, the animals are not banned from coming into school but every effort is made to segregate the animals from people with phobias.
Poor hygiene	Pupils, teachers, adult helpers	Infection, illness	<ul style="list-style-type: none"> • Cuts and abrasions on the exposed skin of hands and arms are to be covered before handling animals; • Pupils and adults must always wash their hands as soon as possible after handling any animal (or coming into contact with the soil, bedding, water etc in an animal's housing); • Reception & KS1 pupils hand washing is <i>supervised</i> to ensure that it is done properly; • Paper towels for drying hands hygienically are provided; • Reception & KS1 pupils are to be closely supervised to ensure they do not put their fingers in their mouths before hands have been washed;

(continued)			<ul style="list-style-type: none"> Animals are not allowed to wander unrestricted around the classroom; <ul style="list-style-type: none"> Wild birds and mammals are not normally to be brought into schools. However, where a pupils arrives with an injured animal or bird that they have found, while such animals are on the school premises, the following precautions will be taken to guard against the possible risk of disease and parasite transmission: <ul style="list-style-type: none"> The injured animal / bird will be isolated from resident small mammals and birds and kept in quiet, dimly-lit conditions; The animal will be handled as little as possible with due regard for personal health & safety; Any adults and pupils who have handled the animal/bird will wash hands immediately afterwards if it has not been appropriate or possible to protect the hands by wearing suitable gloves. For injured animals consult animal welfare organisations e.g. PDSA, RSPCA or a local vet.
Loss of equipment			
List of significant hazards (something with the potential to cause harm) (1)	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) (Actions already taken to control the risk)
Loss of equipment and materials which have the potential to cause harm	Pupils, teachers, adult helpers	Cuts & lacerations, Ingestion, Inhalation, Eye contact, Skin contact	<p>Good housekeeping should be maintained at all times.</p> <ul style="list-style-type: none"> pupils are instructed to tidy up when finished lesson, replace materials and tools in storage cupboards. Adults are responsible for storing equipment and materials which have the potential to cause harm out of reach of children. Materials and equipment with the potential to cause harm are issued using a counting 'out and in' system; Materials and equipment with the potential to cause are kept secure when not in use to prevent unauthorised use. In the unlikely event that an item which has the potential to cause significant harm is misplaced/lost the Headteacher be notified immediately. In the case of her absence the Deputy Headteacher to be notified immediately or in her absence a member of the SLT. The Headteacher must also to be notified as soon as possible.

			<ul style="list-style-type: none"> ♦ Thorough, systematic, searching and assessment of risk to be undertaken as soon as it is realised that the equipment has been lost, if not found quickly a decision whether to contact parents/police to be made by HT (or DHT). Chair of governors to be informed.
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This general risk assessment will apply to this area/task/activity in most schools providing the control measures described are in operation and there are no further local significant hazards. If it does not fully apply, please go to Part B2 on the next page If it fully applies please sign below.

I certify that the risk assessment above fully applies to the area/task/activity under assessment in
(Name of school)

Signed:

Name:

Risk Assessor.

If the control measures described are not in operation and further action is required or there are further local significant hazards please record these here, transfer any actions required to the Action Plan at Part C below and sign off below. Do not sign off above if further actions are required.

PART B2. HAZARD IDENTIFICATION AND CONTROL MEASURES:				
Further Significant hazards	Who might be harmed? (2)	Type of harm (3)	Existing controls (4) (Actions already taken to control the risk)	Further action / controls required (transfer to action plan at Part C below) (5)

I certify that the assessment for the task/activity above covers all the significant hazards applicable(name of school).

Signed:

Name:

Risk Assessor.

PART C: ACTION PLAN

No.	Action required	Person(s) to undertake action?	Priority	Projected time scale	Notes / comments	Date completed