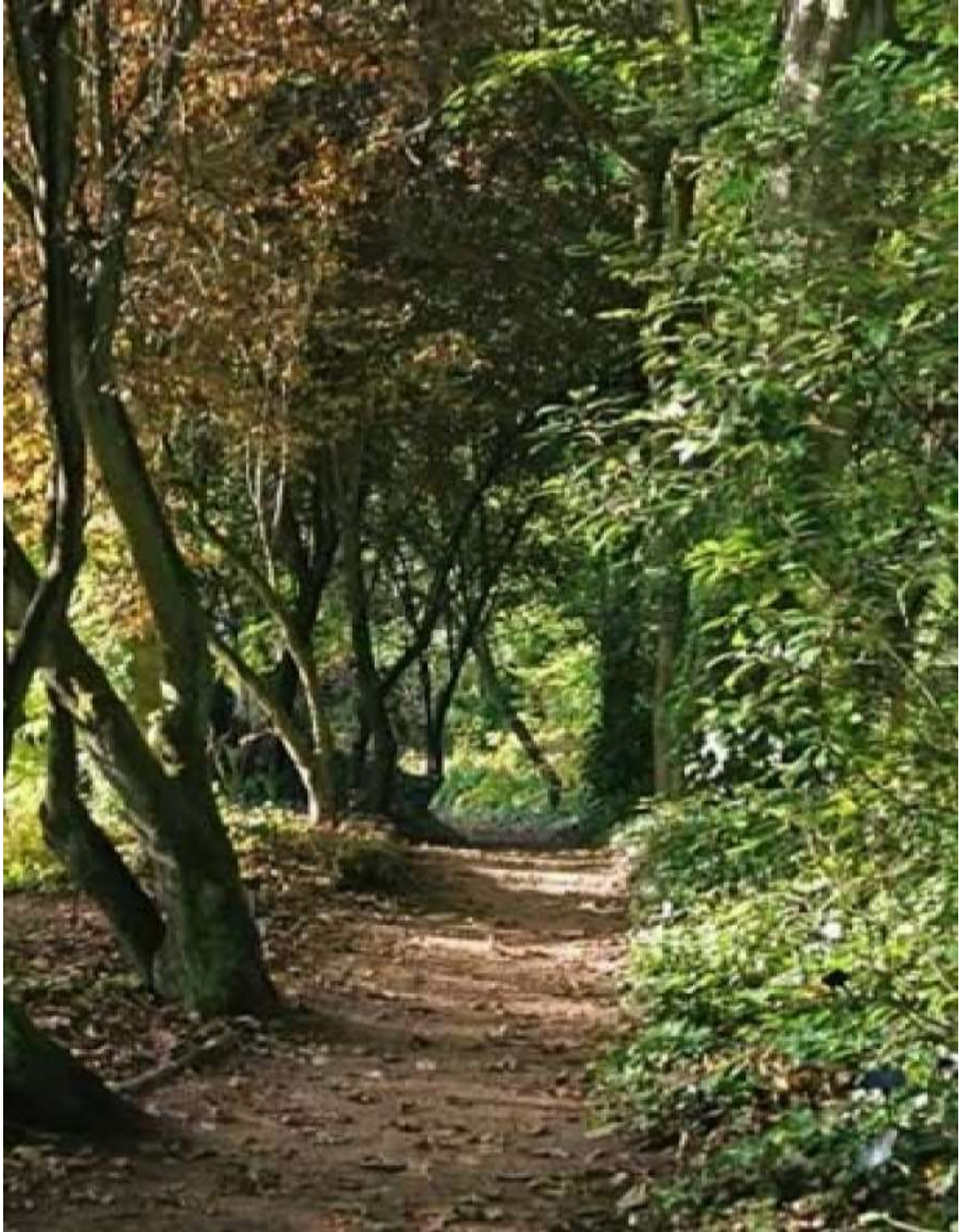


St Joseph's Catholic Primary School

Forest School Handbook



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St Joseph's Catholic Primary School Forest School

A Forest School provides a platform for a structured yet imaginative approach to outdoor play and learning to assist in the holistic development of the child.

Below is an extract from the Forest School Association (FSA) website, detailing the ethos behind Forest School and its importance to learners.

(<http://www.forestschoollassociation.org/what-is-forest-school/>)

Forest School is an inspirational process that offers ALL learners regular opportunities to achieve and develop confidence and self-esteem through hands-on learning experiences in a woodland or natural environment with trees.

Forest School is a specialised learning approach that sits within and compliments the wider context of outdoor and woodland education.

'Forest School is a feeling you can't put into words.' Tonicha, aged 9.

The ethos is shared by thousands of trained practitioners across the UK and beyond. Its roots reach back to early years pioneers in outdoor learning and across the sea to Scandinavia.

'I don't have ADHD when I'm out in the woods.' David, aged 14.

At Forest School, all participants are viewed as:

- equal, unique and valuable*
- competent to explore and discover*
- entitled to experience appropriate risk and challenge*
- entitled to choose, and to initiate and drive their own learning and development*
- entitled to experience regular success*
- entitled to develop positive relationships with themselves and other people*
- entitled to develop a strong, positive relationship with their natural world.*

This learner-centred approach interweaves with the ever-changing moods and marvels, potential and challenges of the natural world through the seasons to fill every Forest School session and programme with discovery and difference. Yet each programme does also share a common set of principles, aimed at ensuring that all learners experience the cumulative and lasting benefits that Forest School offers.

What is a Forest School?

'A Forest School is an innovative educational approach to outdoor play and learning'.

The philosophy of Forest Schools is to encourage and inspire individuals of any age through positive outdoor experiences.

By participating in engaging, motivating and achievable tasks and activities in a woodland environment each child has an opportunity to develop intrinsic motivation, sound emotional and social skills. These, through self-awareness, can be developed to reach personal potential.

Children use full sized tools, play, learn boundaries of behaviour; both physical and social, establish and grow in confidence, self-esteem and become self-motivated. Children need time to thoroughly explore their thoughts, feelings and relationships. This time and reflective practice develops understanding of the world, the environment and everything within it through the use of emotions, imagination and senses.

Forest Schools aim to develop:

Self-Awareness

Intrinsic motivation

Empathy

Good social communication skills

Independence

A positive mental attitude, self-esteem and confidence

(<http://forestschoools.com/what-are-forest-schools/>)



Principles of Forest School

- *Forest School is a long-term process of regular sessions, rather than a one-off or infrequent visits; the cycle of planning, observation, adaptation and review links each session.*
- *Forest School takes place in a woodland or natural environment to support the development of a relationship between the learner and the natural world.*
- *Forest School uses a range of learner-centred processes to create a community for being, development and learning.*
- *Forest School aims to promote the holistic development of all those involved, fostering resilient, confident, independent and creative learners.*
- *Forest School offers learners the opportunity to take supported risks appropriate to the environment and to themselves.*
- *Forest School is run by qualified Forest School practitioners who continuously maintain and develop their professional practice.*

(<http://www.forestschoollassociation.org/what-is-forest-school/>)



Lessons

The below are essential in creating a positive learning environment.

Well planned lessons

- *Meets all learning needs and styles*
- *Appropriately risk assessed without avoiding risk taking opportunities*
- *Ensure support staff are fully informed*
- *Exciting/challenging/creative lessons that do not restrict imagination*
- *Create deep-level learning opportunities*

Happy learners

- *Correct clothing/equipment, warm and not hungry/thirsty*
- *Awareness of boundaries but also the importance of exploring*
- *All inclusive*

Attitude and atmosphere

- *Eye contact*
- *Individual interaction with students, in depth conversation, asking opinions*
- *Child-led - be prepared to ask adults to step back*
- *Keep resources natural, minimise impact*
- *Allow time and space to enjoy the woodland*
- *Ensure all students and helpers/leaders having fun*
- *Treat each child as an esteemed guest of the forest*
- *Show respect to others and nature*



Activities

The children will be given the opportunity to take part in a wide variety of activities using the natural resources available to them. Some (but not limited to) of the possible activities are listed below:

- *Plant and tree identification*
- *Mini-beast identification*
- *Shelter building*
- *Using tools*
- *Creating natural artwork*
- *Coppicing*
- *Woodland management*
- *Fire lighting*
- *Climbing*
- *Outdoor games*

Rules

Forest School is about being outdoors, experiencing the world and also making decisions for yourself and assessing risks v rewards. However, all members of the group also have a responsibility to themselves and others to create a safe and secure environment in which to learn. As such, the following rules must be adhered to (unless otherwise instructed for a particular activity):

- *Walk within the Forest School area*
- *Stay within boundaries*
- *Do not put anything in your mouth*
- *Drag large sticks behind you*
- *Don't damage, hurt or kill anything*
- *Ask an adult before using a tool*
- *Use and store tools as instructed by the Forest School leader*
- *Do not enter the fire circle, even without the fire on*
- *Enjoy yourselves!*

Staffing

*Forest School Leader: Mr John Dawson
Level 3 Forest School practitioner (Pending - February 2018)
Forest School First Aid - Qualified (August 2017)
Enhanced DBS certificate*

The Forest School Leader will be assisted by two Forest School Captains (year 6) and adult volunteers when required. All volunteers will have an enhanced DBS certificate in place prior to assisting.

St Joseph's Catholic Primary School currently has an on-site area for Forest School use (postcode: SN16 9BB), which is enclosed on all sides by fencing and has good visibility across all areas. Staffing requirements will be assessed in the risk assessment for each activity.

For example, on-site activities which require no tools, boiling water or other potentially hazardous equipment can be led by the Forest School Leader and 2 Forest School Captains (Year 6 pupils).

Alternatively, when using tools such as bow saws or knives, or fire-lighting, greater adult supervision will be needed.

St Joseph's Forest School may, on occasion, use an off-site area for the purposes of a particular activity. In this instance staffing ratios will be met as follows:

- EYFS - 1 Adult per 5 children*
- KS1 - 1 Adult per 6 children*
- KS2 - 1 Adult per 10 children*

All volunteers (when required) will hold a current (enhanced) DBS certificate.

Site

St Joseph's Catholic Primary School is very lucky to have full use of 'The Land', which is an enclosed grassy area consisting of a large hill, school garden, Forest School base camp (including fire-pit), an outdoor classroom, a willow tunnel and many different types of plants, trees and some wildlife (insects, birds, small mammals such as rodents or rabbits, etc...). Access is also available to the 'Nun's Walk', which is a long path overlooking 'The Land' that has plants and trees on either side.

Access to the site is through a locked gate on the school playground. This gate can only be opened by members of staff using an electronic key fob. All classes taking part in Forest School must be supervised when entering and leaving the Forest School site via the school playground.

The site is enclosed on all sides by fencing and this fencing acts as the boundary for all children to adhere to. In the event of a fire alarm going off in the school building, children are to return to the outdoor classroom (if safe to do so), to be registered, before being led to the agreed meeting point on the playground by the Forest School leader.

Off-site

There is an aim for each class to visit a local, historic woodland at least once per year. Prior to any session being planned, each location will be suitably risk assessed and the relevant staffing levels will be met.

Risk Assessment

St Joseph's Forest School will take place in the natural world and will therefore pose different risks than lessons taken indoors. Although all activities will be risk assessed by the Forest School Leader, part of learning about the outdoors will be for the children to make their own assessment of risk v reward.

All Forest School sites and activities will be assessed for risk prior to any task taking place. This includes potential hazards and risks posed by the site such as hanging tree branches, stinging nettles and wildlife, for example.

All risk assessments and procedures will be kept on-site and will be available for all staff or volunteers to view at any time. Children will be made aware of any potential risks and hazards that they may face in relation to the activities that day and will be fully briefed on the safe use of any equipment required.

First Aid

The Forest School leader (Mr Dawson) is fully qualified in Forest School First Aid (achieved in August 2017). All initial response to any incident will be overseen by the Forest School Leader. The Forest School leader will have a walkie-talkie, with the school office holding another. If emergency treatment is required (e.g. ambulance or fire service), a call will be placed (999) by the Forest School Leader and the school office will be contacted immediately for further support.

A first aid kit will be on-site at all times for use by the Forest School Leader. This first aid kit includes cling film for the treatment of burns as recommended by the NHS - <https://www.nhs.uk/conditions/burns-and-scalds/treatment/>

Emergency Action Plan

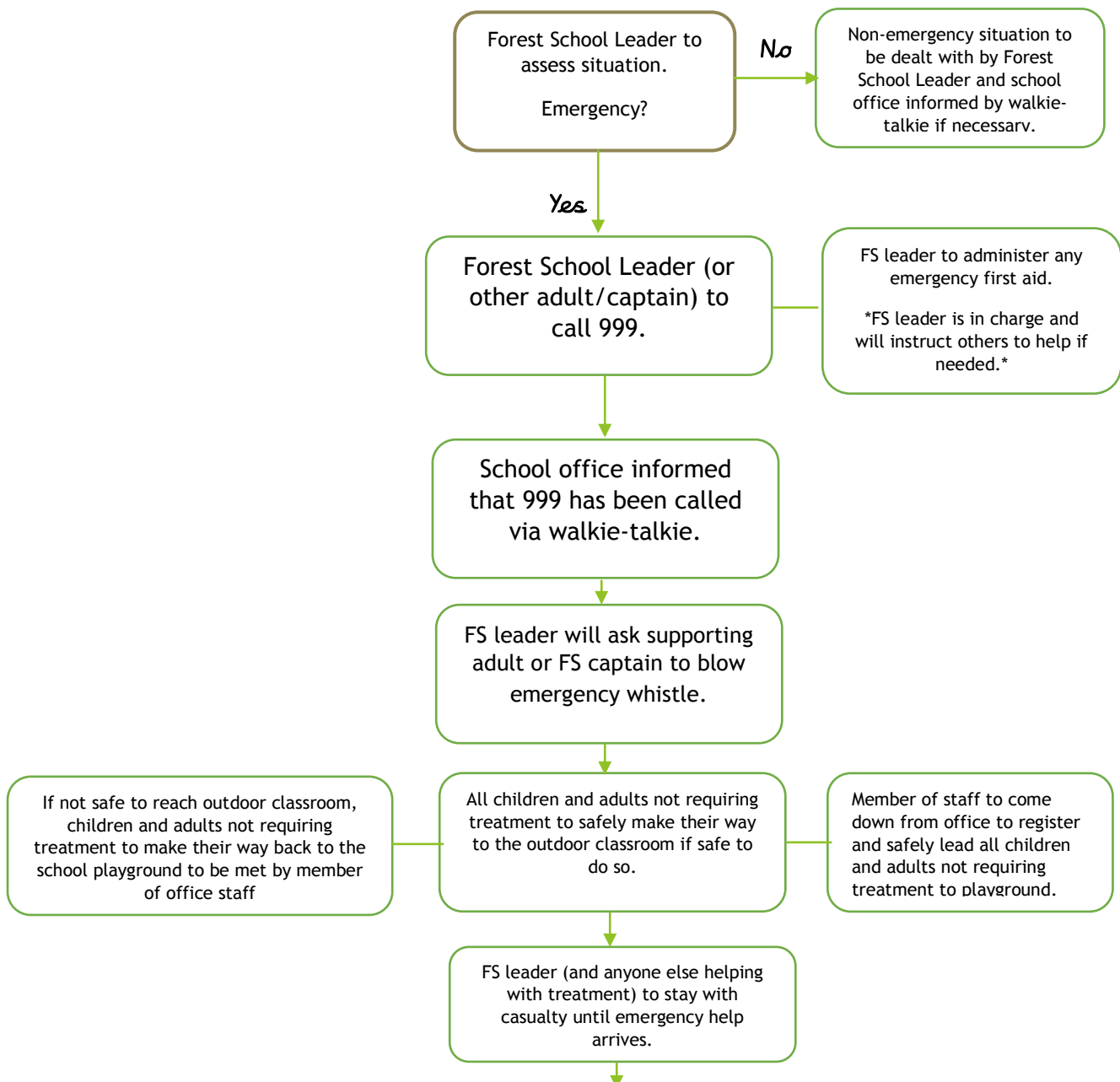
1. Forest School Leader to assess the situation.
2. If emergency first aid is needed immediately, the Forest School Leader will instruct an adult or other helper to call 999 and request emergency support.
3. Forest School Leader to administer any emergency first aid as required. The Forest School Leader is responsible for all instructions regarding treatment of the injured party until emergency support arrives.
4. Forest School Leader, adult volunteers or captains to inform school office that 999 has been called via walkie-talkie.
5. Forest School Captains or adult volunteers to blow emergency whistle.
6. All children not requiring treatment to make their way to outdoor classroom to be registered.
7. Member of staff from school to come down from main building to supervise children not requiring treatment in outdoor classroom. Member of staff may lead these children to the school playground if safe to do so.
8. Forest School Leader (and any other people being used to help provide treatment) to stay with injured party until emergency support arrives.

All teaching staff, support staff, Forest School Captains and adult volunteers must have read and agreed the above actions prior to taking part in Forest

Schools. A laminated copy of the 'Emergency Procedure Flow Chart' will be stuck in the Forest School base camp, the outdoor classroom and the school office.

Emergency Procedure Flow Chart

- In the event of a potential emergency the Forest School Leader (or other supervising adult) will blow the emergency whistle to indicate to the other adults to refer to the following procedure.



School office to inform parents or
emergency contact of casualty.

Clothing

To take part in Forest School at St Joseph's, all children and adults must wear appropriate clothing. This is to ensure each person's safety and protection from the elements and natural world. Due to the weather and terrain, any clothing and footwear is likely to get wet and muddy. Some clothing may also experience 'wear and tear' due to working outdoors so wearing old clothes is advisable.

Appropriate clothing

- Long-sleeved top
- Trousers (not shorts or skirts)
- Sturdy footwear - Walking boots or wellies (trainers may be suitable in the summer months)
- Warm socks
- A warm coat
- Waterproof coat and trousers are advisable in the event of heavy rain
- Warm hat and gloves
- Sun-cream and sun hat (if necessary)

St Joseph's Forest School will go ahead in all weathers (barring extremely strong winds) and therefore it is essential that the above rules are adhered to. An assessment of each child's clothing will be made prior to each session. In the event of a person not having appropriate clothing for the session, every effort will be made to find something in school to allow them to take part, however if the school does not have the required clothing for that person they will be unable to take part for that session (or until suitable clothing has been provided).

Please check clothing with the Forest School Leader in advance of the sessions to avoid disappointment.

Personal Protective Equipment (PPE)

All participants must wear weather appropriate clothing and footwear (see 'Clothing' section above). In addition, the school and Forest School Leader are responsible for providing and maintaining any additional personal protective equipment (PPE) that is required, such as those used when working with tools or fire. The PPE required will be decided based upon the risk assessments for each activity/lesson. The Forest School Leader and the school will be responsible for ensuring the PPE items meet the specifications for the task, are in good condition and size appropriate for the child.

Examples of possible PPE that may be used during activities (this list is not exclusive or compulsory and each activity will be assessed dependent on the risks it presents for the student age and ability):

Hi-Vis jacket

- Walking near roads or near water
- Younger students



Fire gauntlets (gloves/mitts)

- Feeding fires
- Campfire cooking



Hard hats

- Working with overhead branches



Work/Garden/Rigger gloves

- Working with rough material
- Using tools - generally only on the hand without the tool
- Clearing land



Goggles

- To protect the eyes during whittling activities.



Personal Protective Equipment may also include:

- appropriate footwear (strong and good tread)
- sun cream
- sun hat
- other appropriate clothing for weather conditions

Toilets

On-site

'The Land' is approximately 1 minute walk back to the school building where standard, flushing toilets are available. Children will be given the opportunity to go to the toilet prior to each session starting and sessions last for no longer than 2 hours maximum.

In the event of a child needing the toilet, the following rules are:

- KSI children to be accompanied by an adult or Forest School Captain.
- Year 3 and 4 children to be accompanied by an adult or Forest School Captain.
- Year 5 and 6 children to be allowed to go the toilet in pairs.

In the event of an 'emergency' need for a toilet, a pupil will be allowed to go behind a nominated (by the Forest School Leader) tree and will be given hand-sanitiser to clean their hands afterwards.

Off-site

On occasion, St Joseph's Forest School may use a pre-planned, off-site location. As these will most likely be ancient woodland, it is unlikely that toilet facilities will be available. All children will be given time to visit the toilet immediately before embarking on any journey to a local, off-site location.

If the toilet requirement is not an emergency (i.e. urinating if the pupil is happy to do so), where there are no flushing toilet available, a pupil will be allowed to go behind a nominated (by the Forest School Leader) tree and be given hand-sanitiser to clean their hands afterwards.

Toilet roll and hand sanitiser will be carried by the Forest School leader in the case of anyone requiring a 'number 2'.

Hygiene

The Forest School Leader will keep a spray bottle full of water, a bottle of anti-bacterial hand-soap and a bottle of anti-bacterial hand-sanitiser on-site for use when required.



Food and Drink

Standard

Children should bring a full water bottle to each session and leave in the outside classroom. Running water is readily available in the school building.

No outside food or drink should be brought on to the site during a Forest School session unless instructed to do so by the Forest School leader.

Children should be sure to remove any rubbish (plastic bottles, etc...) they create on the site.

Activities

****Do not put anything in your mouth during a Forest School session!****

On occasion, a Forest School activity may require the children to pick, cook, drink or eat something from the natural world. On these occasions, anything to be eaten or drunk will only take place under the direct supervision of the Forest School leader.

Some possible hazardous items that must not be put in mouths are:

- Berries*
- Fungi (Mushrooms)*
- Water not from a bottle or tap*
- Plants and trees (Yew, Deadly Nightshade, Daffodil Bulbs, Chrysanthemums, Hemlock Water Dropwort, Snowdrops, Mistletoe, etc...)*
- Insects or dead animals*

Tools

A key part of a Forest School is to allow children to take responsibility and create things they may not have thought possible. Using tools (with adult supervision) allows children to learn new skills and use their 'diamond power' to take care whilst doing so.

Some of the tools that may be used during Forest Schools are:

- Fixed-blade sheath knife
- Bow saw
- Loppers
- Bill hook
- Hand drill
- Palm drill

Other specialist tools may be used during a specific Forest School session and this list will be updated annually to reflect this.

Using and Storing Tools

- All tools will be cleaned, maintained and stored securely (locked shed) by the Forest School Leader.
- Potentially hazardous (e.g. sharp) tools will be transported by the Forest School Leader to the site in a suitable container.
- Only tools supplied by the Forest School Leader may be used during Forest School. Nothing is to be brought in from home.
- Additional adults (DBS checked) to be present for sessions when children are using potentially hazardous (e.g. sharp) tools.
- Tool safety talks (safety) to be given by Forest School leader prior to children using each tool.
- All tools to be counted in and out by the Forest School Leader (or other responsible adult) at the beginning and end of each activity.
- Tools are only to be used in a designated area (by the Forest School Leader) and in the way shown during the tool safety talk.
- If any tools are being used inappropriately or the Forest School Leader deems the behaviour of a child or group of children to not be acceptable, those children will be unable to take part in the activity.

Tool Checking, Cleaning, Storing and Maintenance

The Forest School Leader will be responsible for the checking, cleaning, storing and maintenance of all tools used at Forest School. This includes ensuring tools are cleaned and sharpened properly to ensure maximum performance.

All tools will be counted in and out by the Forest School Leader or other supervising adult.

All tools not suitable for use will not be brought out during a Forest School session.

Tool Name	Checked	Cleaning	Storage	Maintenance (sharpening etc...)
Fixed-blade sheath knife	Visual check for signs of damage to handle and blade. Must be secure. Check sharpness by running blade across a piece of paper and checking that it has made a score.	Water or oil	Overnight in Forest School shed in container. Forest School shed is locked when not in use by supervising adult. In box for transportation and when not in use.	Use sharpening block. Start on coarse then progress to fine. Place on something solid to begin and perform figure of eight motion. Secure block with other hand. Take care on alternate side. 26 degree angle is ideal.
Bow saw	Check for cracks in handle, blade teeth all present, alignment and tension correct. Replace blade when saw is no longer cutting.	Handle - Damp rag Blade - Cloth and oil	Overnight in Forest School she. Forest School shed is locked when not in use by supervising adult.	Cannot sharpen blade. Replace broken blades.
Loppers	Check for cracks or loose handles.	Handle - Damp rag Blade - Cloth and oil	Locked in Forest School shed.	Use diamond sharpening file. Sharpen from the dull (back) edge towards the sharp (front) edge.
Bill hook	Check for signs of wear and cracks in handle.	Handle - Damp rag	As fixed-blade sheath knife.	Use cigar stone for sharpening a curved blade. The stone moves

	<p>Check blade and handle are securely together.</p> <p>Check tang is not loose.</p> <p>Ensure cover is dry at all times.</p>	<p>Blade - Cloth and oil</p>		<p>while holding the blade down. Use a figure of eight motion. Ensure sharpen the blade rather than the shoulder.</p>
Hand drill	<p>Bit fits securely in drill.</p> <p>Ensure handle and cogs are not loose.</p>	<p>Remove bit and blow out any dust.</p> <p>Use cloth and gum oil to remove dirt from bit.</p> <p>WD40 for cogs.</p>	<p>Locked in Forest School shelter.</p> <p>Turn drill bit upside down and store in drill.</p>	<p>Bit sharpness will be found via use.</p>
Palm drill	<p>Bit fits securely in drill.</p> <p>Ensure handle is secure with no cracks.</p>	<p>Blow away any dust.</p> <p>Use cloth and gum oil to remove dirt from bit.</p>	<p>Locked container in Forest School shelter.</p>	<p>Bit sharpness will be found via use.</p>

Tool Use Procedures



Fixed-blade sheath knife:

- Knives to be counted in and out and supervised as necessary.
- Push V to open cover.
- Always hold by the handle.
- Wear a glove on your non-tool hand (i.e. gloved hand to hold the stick when whittling).
- Place knife in sheath whenever not in use (must hear the 'click' to ensure it is secure).
- Safe space - An outstretched arm and extended tool length on each side.
- For use individually - No partners.
- Ensure your legs are behind the direction the knife will be moving.
- Whittle downwards, away from the body and on to a block.
- Never whittle sideways - Ensure there is a clear arc in front of you.
- When finished with the knife, place back inside sheath and return to the storage container.



Bow saw:

- Bow saws to be counted in and out and supervised as necessary.
- When not in use, place on floor beside you with handle furthest away from the body.
- When carrying, hold down by your side with blade facing the floor.
- Push blade cover off from the top.
- To place the cover back on, ensure the teeth are covered first before clicking - Adult supervision required.
- Wear a glove on non-tool hand.
- Safe space - An outstretched arm and extended tool length on each side (your partner is allowed inside this area).
- To be used in pairs only.
- Used to cut anything larger than a 2p piece.
- When finished, return to storage container.



Partner sawing (using bow-saw):

- Both people to have right knee down, facing each other, in respect position.
- Both should have their respective knee down closest to the saw.
- If a pair has one left-handed person and one right-handed person, both should be kneeling on the same side.
- One partner holds the handle.
- One partner hold the opposite end of the saw, as if there is a 2nd handle.
- Gloved (non-tool) hand of 2nd partner (non-handle end) to be placed on log directly in front.
- Gloved (non-tool) hand of lead partner to be placed through the saw (above the metal blade and below the handle) and on top of the 2nd partner's hand to secure the log.
- Create a groove.
- Cut using the whole length of the saw.
- Lead partner to instruct when to stop.
- When finished, return to storage container.



Loppers:

- Loppers to be counted in and out and supervised as necessary.
- When not in use, place on floor with the blade by the side of your foot.
- When carrying, hold by your side using the lower handle only.
- Pass to another person by the handle only.
- Safe space - An outstretched arm and extended tool length on each side.
- No gloves required as grip required for both hands.
- Do not chop anything larger than a 2p piece.
- When finished, return to storage container.



Bill Hook:

- Bill-hooks to be counted in and out and supervised as necessary.
- When not in use, place on the floor next to foot with blade facing your body.
- Always hold by the handle.
- Glove on non-tool hand.
- Safe space - An outstretched arm and extended tool length on each side. A partner is allowed inside this area to secure the wood.
- When finished, return the bill hook to the storage container.



Bill Hook (wood-splitting):

- Both partners to sit in a solid (respect) position, with all limbs behind the centre of the solid base.
- Stand a small log (to be split) on top of a solid base.
- Lead partner holds a mallet in a non-gloved hand.
- 2nd partner places the bill hook across the centre of the log to be split.
- Lead partner checks that hands and other limbs are clear and checks with 2nd partner that they are happy to start.
- Lead partner lightly creates a groove by tapping on back of bill hook.
- Once a groove is created, lead partner strikes down on the back of bill hook with some force until log splits.
- Once log is split, 2nd partner places bill hook on the floor.
- Lead partner moves split logs and process is repeated as necessary.
- Once finished, bill hook to be placed in storage container.



Hand drill (creating holes):

- Hand drills to be counted in and out and supervised as necessary.
- When not in use, place on floor next to foot.
- Hold down by side.
- Pass it handle first.
- Use in pairs (for securing wood), unless using a clamp.
- Safe space - An outstretched arm and extended tool length on each side. A



partner is allowed inside this area to secure the wood.

- Partners sit opposite each other.
- Lead partner holds handle.
- 2nd partner places hand on top of lead partner's hand.
- Lead partner secures the wood.
- 2nd partner twists the handle towards lead partner.
- If working, should clearly see sawdust.
- Once hole is created, 2nd partner places the drill on the floor in safe position.
- Lead partner removes the newly drilled wood disk.
- When finished, hand drill is returned to storage container.



Palm drill (creating holes):

- Hand drills to be counted in and out and supervised as necessary.
- When not in use, place on floor next to foot.
- Hold down by side.
- Pass it handle first.
- Safe space - An outstretched arm and extended tool length on each side. A partner is allowed inside this area to secure the wood if necessary.
- Ensure the wood you are drilling is safely on top of a solid base.
- Place the point of the drill on to the area of the wood you wish to make a hole.
- Twist the drill to create a hole. You will see sawdust when this is working.
- When the hole is complete, remove the palm drill and place on the floor, alongside your foot and close to your body.
- Remove the piece of wood you have been drilling.
- Once finished, return the palm drill to the storage container.

Fire Policy and Procedures

Fire is fundamental to human life and being able to safely build a fire in the natural world is an exciting and interesting skill for children to learn. It can breed confidence and self-esteem, whilst also being a life-saving skill if ever it were needed.

Essential knowledge – The fire triangle



Prior to any fire-lighting activity, participants will receive a talk about the fire triangle, to ensure they understand the 3 elements needed to create a fire. Without all 3 of these elements present (and in the appropriate quantities) you will not be able to light a fire.

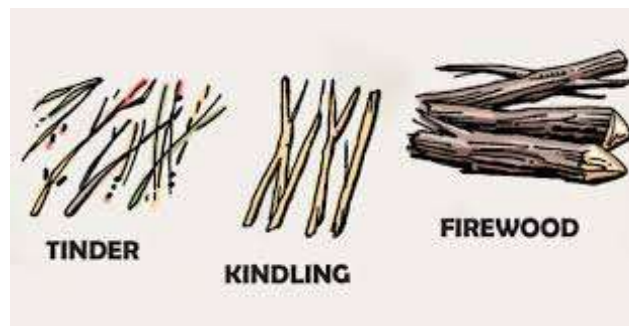
Rules

Fire and fire-lighting must be treated with the utmost respect and the following rules must be adhered to at all times:

- Never cross the fire-pit, even when it is unlit.*
- Only enter the fire area when instructed by the Forest School Leader.*
- No running in the camp-fire area, even during games.*
- Walk around the outside of the fire area.*
- Ensure hair is tied back when approaching the fire.*
- Ensure you have no loose clothing when approaching the fire.*
- Only build, light or feed a fire when instructed to do so by the Forest School Leader.*
- Never leave a fire unattended.*
- Follow the Forest School steps for setting up a fire (see below).*
- In the unlikely event of a person's clothes or hair catching fire, immediately stop, drop and roll until the flames have been extinguished.*

Collecting fuel

- Prior to building fire site, children to collect tinder, kindling and firewood:
 1. *Tinder* - An easily combustible material such as wood shavings, dry grass, hay, etc...
 2. *Kindling* - Small, dry, sticks or twigs (start with spaghetti size thickness!)
 3. *Firewood* - Larger, dry sticks.
- It is absolutely crucial that you have enough fuel to maintain the fire. Collect more than you think you need!
- Store in separate piles from smallest to largest.



- Remember to use dead wood where possible rather than taking branches from living trees. However, you must also be aware that a piece of dead wood can be home to many creatures so take care to have the minimum impact possible on the habitats of the woodland wildlife.



Fire site

- Collect 4 large sticks, approximately 1 metre in length, and place in a square formation to surround the site of your fire.
- If you are creating a 'leave-no-trace' fire, dig 4 turfs with a spade inside the square log formation and move the sods of earth to one side.



- Ensure there is a minimum of 1.5 metres to the nearest seating around the square formation.
- The area between the square formation and seating (1.5m away all around) is known as the fire area.



- Inside the fire area, keep a pair of fire (gauntlet) mitts and a full bucket of water at all times.



- Ensure there is a first-aid kit, including cling film on-site.
- Check the following:
 - Fire site is not built on peaty soil.
 - No overhanging trees.
 - There is a clear area behind the seats and in the fire area - no trip hazards.
 - Anyone due to enter the fire circle does not have loose hair or clothing hanging down.
- Ensure your fuel (kindling and firewood) is stored in size order close to, but outside of, the fire area.



- If preparing food, ensure there is a designated clean area that includes a cool box (if needed), a chopping area and hand-washing facilities (or anti-bacterial gel available).
- Compost and recycling bins should be made available if necessary.

Campfire structures

- There are a variety of different structures you can build to start a fire. Below are some of the most common.
- Always start by placing your dry tinder in the centre of your fire-site, where you want the campfire to take place.
- Don't forget to leave an opening to be able to reach the tinder when you want to light it.
- Preferably light with the wind behind you to blow the flames on to the tinder and kindling.
- Don't pack your structure too tightly as a fire requires spaces for oxygen.
- It is better to have a taller pile of wood than a wider pile.

Criss-cross (or log cabin) fire

Although this type of fire can be more difficult to light, once going it is relatively low maintenance and should develop steadily.

- Begin by placing your dry tinder in the centre of your fire-site and add some small twigs.
- Place 2 pieces of kindling parallel to each other on either side of the tinder and small twigs.
- Lay 2 more pieces of kindling on top of the pieces on either side of the tinder to create a square shape around the tinder and twigs.
- Ensure you leave a small space to reach the tinder with a spark for lighting the fire. If possible, have the wind blowing towards this space.
- Lay more pieces of kindling in a criss-cross formation until the fire is 3 to 5 layers up (not too high - ensure the structure is secure!).
- Preferably use small pieces as you reach the top to create a pyramid effect.
- Ensure you have enough small twigs and kindling nearby to feed the fire through the gaps if necessary.



Teepee Fire

This type of fire is very common and is good for boiling water as the heat rises initially to a particular point. Once it falls, lay firewood on top to create a criss-cross (log cabin) fire.

- Place your tinder and some small twigs in the centre of your fire-site.
- Use 3 or 4 pieces of kindling and stick them in to the ground, leaning towards a central point directly over the tinder to create a teepee formation.
- Continue to lean more kindling to create a teepee formation, ensuring you leave gaps for oxygen to get through.
- Ensure you leave an opening (preferably with the wind behind you) to be able to light the fire.
- Using 3 or 4 larger sticks, replicate your initial formation by creating a larger teepee directly over the centre of your original teepee and tinder.
- Ensure you continue to leave space for oxygen to flow through the structure and that you do not close over the space left for lighting the fire.
- Lean additional, smaller firewood for support if needed.
- Ensure you have enough small twigs and kindling nearby to feed the fire through the gaps if necessary.



Lean-to Fire

This type of fire is useful in difficult conditions as it is more protected. However, ensure your tinder is close to your kindling as with such a large amount of oxygen flowing in to this fire, the tinder will disappear quickly.

- Place your dry tinder in the centre of your fire-site.
- Find a long piece of kindling and stick this directly in the ground at a low angle, ensuring that it leans over the top of the tinder.
- If possible, ensure the initial kindling stick is facing into the wind.
- Using smaller kindling, lightly lean pieces on top of the tinder.
- Also lean pieces of smaller kindling on the support stick.
- Once the structure is stronger, start to lean some large kindling on the outer layer.



Lighting a fire using a flint and steel

Once you have collected enough fuel, checked your fire-site and safety equipment and created a campfire lay, you will be ready to light your campfire.

If you have matches or a lighter, simply light the tinder and use a wafting technique to add oxygen to the fire (be careful not to blow it out in the early stages!). Initially feed your fire with tiny (spaghetti-sized) sticks to help get it started.

Although you need your hands to light the fire initially, use fire gloves if you need to get close to the flame to add fuel.

At St Joseph's Catholic Primary School Forest School, we will be encouraging all children to light their fires using a flint and steel.



- *Ensure you are not wearing gloves on either hand.*
- *Hold the steel firmly in your non-writing hand.*
- *Place the steel close to the tinder.*
- *Holding the flint against the steel, strike in a downwards motion at approximately 45 degrees to create a spark.*
- *The spark should be aimed at the centre of the tinder.*
- *You may need to repeat this action a few times before your tinder lights.*

- Once your tinder has lit, you may want to lightly waft the fire to add oxygen. Be careful not to blow it out in the early stages!
- Feed your fire with small (spaghetti-sized) kindling if necessary.



Please note - In the absence of suitable dry tinder, or in cases of inclement weather (or to increase the likelihood of success for particular groups), cotton wool and Vaseline may be provided to help with the ignition process.



Campfire management

- If aiming to keep your fire lit for an extended period of time, you will need to feed it appropriately-sized sticks.
- Nominate one person to take care of the fire-site and feed the fire using a fire mitt.
- Other members of the team should continue to collect appropriately-sized firewood and store it by size.
- At the request of the person taking care of the fire, another group member can bring firewood to the fire-site for the nominated person to feed the fire.
- All group members not collecting wood or feeding the fire, should sit on the seats at least 1.5 metres away from the fire-site.
- Jobs can be alternated as long as the fire is not left unattended.
- When changing jobs, move to the edge of the fire-area, to give the gloves to the person taking over fire feeding duties.



Smoke Inhalation

Prolonged smoke inhalation can cause significant health problems. Therefore all children and supervising adults will be reminded that it is important to stay clear of the smoke as often as possible. Some smoke inhalation will likely take place as a consequence of lighting a fire but by moving safely around the fire when necessary, this can be limited as much as possible.

Extinguishing a campfire

Fire can spread rapidly if not placed, prepared and cared for properly. Children must also learn how to extinguish a controlled fire effectively.

- Allow all sticks in the fire to burn down to embers.
- Pour water in a spiral from the outside edge in to the centre of the fire.
- Water will be kept on-site at all times and children will be advised of how to extinguish a fire before taking part in any fire-lighting activities.
- Once a fire is small enough, use the bottom of appropriate footwear to stamp out the remaining small embers.
- *NEVER stamp on or walk through a lit fire with flames still burning or red hot embers still smouldering!***
- If completing a 'leave-no-trace' fire, ensure the fire and embers are definitely out using water and by stamping on in appropriate footwear.
- Once you are happy that the embers are cold and are no longer smouldering, replace the turf sods back in to their original place on the fire-site.
- Remove all sticks and any other debris from around the fire-site.



Leaving a permanent fire site safe

St Joseph's Forest School site benefits from a fantastic, covered camp-fire shelter. Within this shelter is a permanent fire-site, which can be used for a variety of activities such as campfire cooking, storytelling or as a space to visit to quietly reflect whilst listening to and watching a real campfire.

It is vitally important for a permanent fire-site to be left safely for as it will be left unattended for some time given the nature of its location.

- Ensure the fire is completely extinguished (see 'Extinguishing a campfire' section).
- Spread the ashes around the fire-site.
- Once the fire-site is cool, remove any rubbish or debris.
- Clear the fire area (space between fire-site and seating) of any trip hazards that may have been left.
- Refill the water butt and put away fire gloves in a safe and dry location.
- Stack any remaining kindling or firewood in a safe and dry location for use next time.



Leaving a temporary fire site safe

Sometimes, it may be necessary to build a fire in a temporary location. It is possible to build a 'leave-no-trace' fire by following the steps below:

- Choose your site carefully ensuring there are no overhanging trees or that you are on peat, for example.
- Collect tinder, kindling and firewood and stack securely near your chosen site.
- Find 4 sticks, approximately 1 metre long and create a square for your fire-site.
- Inside the square, dig out 4 large sods of earth (preferably using a spade) and place the sods safely near the fire-site.
- Place your tinder in the centre of the pit and build a campfire lay around it.
- Use a fire striker to light your tinder and feed the fire small kindling to get it started.
- Waft the fire to add oxygen if necessary.
- Maintain your fire for as long as is needed using firewood.
- Extinguish your fire (see 'Extinguishing a campfire' section above).
- Once cooled, spread the ashes around the fire site and stamp on them lightly to ensure the embers are out.
- Look for any remaining smoke and listen for any sizzling or burning sounds.
- You should be able to touch fire-site with your hand to check it is out but take great caution when doing so.
- Once you are happy the embers are completely dead, replace the turf sods back in the pit and use your foot to re-secure them as much as possible.
- Remove the fire-site square and return the pieces of wood to where you found them.
- Remove any rubbish or debris that may be a trip hazard.
- Return any stacked wood that you no longer need to the woodland, or take with you for a future fire if needed.

Campfire cooking

A campfire can be useful for a number of things, principally light and heat. However, it can also be used to boil water and cook food if done safely. Equipment such as Kelly (Ghillie or Storm) kettles, iron tripods, Ezystoves and Dutch ovens, for example, can be used to create some tasty dishes, although sometimes a long green stick will be enough to get cooking! Boiling, frying and grilling can all take place over an open fire (or embers) using the correct equipment.

Some possible campfire food and drink ideas are below:

- Vegetable soup
- Stew
- Hot chocolate
- S'mores (cooked marshmallow sandwiched between 2 chocolate biscuits)
- Nettle tea or soup
- Roasted meat



Dutch oven

A Dutch oven is cast iron (or ceramic) thick-walled cooking pot with a lid that can tolerate extremely high temperatures. These make perfect pots for cooking large soups, stews and boiling vegetables or water on a campfire.

Below are instructions for making chunky vegetable soup.

- Prepare your vegetables by peeling and chopping as necessary.
- Use any vegetables you like such as: onion, garlic, pepper, carrot, potato, parsnip, peas etc...
- Add a chilli, chopped in to small pieces, for some extra kick!
- Gather some tinder, lots of kindling and lots of firewood, including some larger (foot-long) pieces.
- Place some tinder in the centre of the fire site and build a campfire lay above.
- Light the tinder using a fire striker and feed the fire small kindling, then increasingly larger firewood.
- Once the fire is going, but not too large, pour some oil, chopped garlic and onions in to the Dutch oven and (wearing fire mitts) place in the centre of the fire, leaving the lid off.



- After a couple of minutes (or when the onions and garlic are sizzling nicely), pour in the rest of the chopped vegetables and pour in some cold water to cover the contents.
- Wearing fire mitts, place the lid on the Dutch oven.
- Carefully build the fire around and on top of the Dutch oven, using larger firewood, until it is well covered. Remember to leave space for air to flow through your fire.



- *Maintain the fire and allow the water to reach boiling point.*
- *If too much water evaporates, use the mitts to open the lid and add more to ensure it doesn't run dry.*
- *After 30 minutes (or when you are happy the vegetables are boiled through), remove the Dutch oven from the fire and place safely away from the fire site.*
- *Remember to use mitts to remove the lid and serve with a piece of bread whilst watching your fire burn down to embers.*



Marshmallows

On limited, special occasions (at the discretion of the Forest School Leader) there may be an opportunity to roast marshmallows over an open fire. The children must have earned the trust of the Forest School Leader with their exemplary behaviour in and around the fire circle throughout their time in Forest School to be allowed to cook this close to an open fire.

- Find a green stick approximately the length of your arm.*
- Place a marshmallow securely on the end of the stick by piercing it, leaving approximately 2cm of stick showing.*
- When instructed by the Forest School Leader, approach the fire site and take up a safe and secure position on the edge of the fire site.*
- Place the marshmallow over the hot embers, rather than any flames.*



- If your marshmallow catches light, blow out immediately.*
- Hold your marshmallow a few centimetres over the hot embers for approximately 15 seconds.*
- Turn the stick slowly to cook evenly.*
- Once the marshmallow appears cooked, leave for 30 seconds to cool down.*
- Bite in carefully to ensure it is cool enough to eat.*
- Enjoy!*



Boiling water using an Ezystove

- Gather some tinder, lots of small (spaghetti-sized) kindling, larger kindling and some smaller firewood and place nearby.
- Fill iron or steel kettle with cold water and place to one side.
- Place Ezystove in centre of unused fire-site (refer to fire site section above).
- Place some tinder in the bottom of the Ezystove, preferably leaving the hole and tinder with the wind blowing towards it.
- Add some of the smaller kindling to make a small teepee inside the base of the Ezystove.
- Using your fire striker, ignite the kindling using a spark (you may need to do this more than once).
- Once you have a flame, begin to feed the fire some of the smaller kindling and build as necessary.
- Once you are confident you have a fire going, place the kettle on top of the Ezystove safely and securely.
- Continue to feed the fire as necessary using a glove.
- Once the kettle has steam coming out of the end, use a fire-gloved hand to remove the kettle and place somewhere safely.
- Pour the boiling water using a glove as the kettle will be extremely hot.
- Extinguish the fire safely when finished.



**Please note, if using a tripod and kettle rather than an Ezystove (i.e. for items that may need a larger fire underneath to boil for longer), create your fire in the centre of the fire site with the tripod placed over the centre of the fire. Build your fire patiently and use larger firewood to maintain the fire for the amount of time needed. Extinguish the fire when finished.*



Kelly, Ghillie or Storm kettles



These clever kettles vary slightly in design (Ghillie kettles have a whistle, for example) but all achieve the same aim; to boil water effectively in a light to carry and efficient way. They work by using a chimney system which pulls heat from a fire in the base, right through the chimney to heat the water quickly once a small fire has been created below. Don't ever stand or look inside the hole at the top of the kettle as a cork may come out or boiling water could jump out of an open hole. Stand well clear!

Essential safety tips for using a Kelly (Ghillie or Storm) kettle

- *Always have water in the kettle when there is a fire lit underneath it.*
- *Ensure your kettle is placed in a safe place on solid ground.*
- *Create a square of logs around your kettle to indicate to others not to step inside the fire area.*
- *Ensure there is no plug in the kettle when it is boiling.*
- *Have the hole facing the wind where possible.*
- *Raise the kettle slightly off the ground where possible.*
- *Always have the spout of the kettle on the opposite side of the hole for igniting the fire. That way you are never stood over the spout.*
- *Never blow in to the hole to add oxygen as the kettle may fall. If you need to add oxygen, waft using some bark or another material.*
- *Always leave the handle down to the side of the kettle.*
- *Never grab the handle if it has been left over the top of the kettle as it will be scorching hot from the flames.*

Boiling water using a Kelly, Ghillie or Storm kettle


- Place the small bowl on a solid base and create a fire-site safety square around the outside using sticks.
- Collect some tinder, a large amount of small (spaghetti-sized) kindling and some slightly larger firewood (not too large as it won't fit!).
- Fill the kettle with water and place to one side.
- Place your tinder inside the small bowl and add a few small pieces of kindling in a criss-cross formation.



- Allow space for air to flow through your fire lay and do not go above the height of the bowl or the kettle will not be able to be placed on top.
- Pull some tinder (cotton wool works well here) and leave the end sticking out of the hole in the side of the bowl. If you can have the wind behind you and blowing in to the hole it will help it ignite.
- Place your kettle back on top of the bowl, leaving some tinder sticking out of the hole.
- Use a fire striker to create a spark and ignite the tinder and kindling. Leaving the kettle on top will draw the fire up the chimney and make it easier to light.



- Once it is going, put on some fire mitts and continue to feed the fire by dropping small kindling through the hole in the top of the kettle.

- 
- *Waft the fire to keep it going if necessary.*
 - *Maintain the fire until the water has boiled.*
 - *Once the water is boiled, allow the fire to burn down or repeat.*
 - *If the handle has been left to the side of the kettle, put on some fire mitts and pick up the kettle carefully by the handle, ensuring there are no flames coming out of the top.*

Making Natural Items

For millions of years, humans have been creating items using tools and resources found in the natural world. Below are a number of items that could be made during Forest School sessions using particular skills and some equipment. Please refer to the 'Tool use procedures' section of the handbook for instructions on how to safely use each tool when required.



Identity necklace:

Loppers, bow saw, hand drill, wool, felt-tip pens.

- Find a round stick with a width slightly larger than a 50p piece or cut one using loppers.
- With a partner, safely use a bow saw to cut a disc about 1cm thick.
- Next, place your disc on a hard surface and use a hand drill (partners) or palm drill (individual) to create a small hole near the top of your disc.
- On one side of the disc, use a felt tip pen to clearly write your name and choose a symbol to identify yourself.
- On the other side, draw or write something to show an area of the natural world that interests you.
- Next, find a natural substance (such as long grass) or (easily breakable) wool and feed it through the hole to hold your disc.
- Finally, tie a reef (overhand) knot in the wool to create a necklace.



Kazoo:









Loppers, bill hook, mallet, sheath knife, long grass, 2 x elastic bands.

- Using loppers, cut a straight piece of wood (preferably hazel)



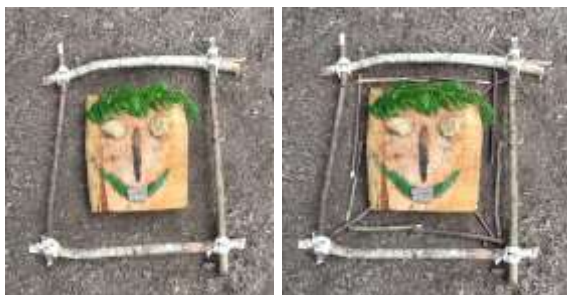
approximately 10 - 15cm long and the width of a 50p piece.

- Stand your piece of wood on one end on a solid base and ask your partner to secure it by placing the blade of a bill hook directly across the centre of the top end.
- When safely held (and no hands are in the way!), strike the back of the bill hook with the mallet to split the wood down the centre. This may take more than one strike.
- Once split, hold the pieces together and use a sheath knife to make 2 marks, approximately 1 inch apart in the centre of the stick.
- Separate the 2 halves and make a groove using the knife.
- Cut out the inside space until when you put the 2 pieces together, you have a rectangular space left inside.
- Find a long, thick blade of grass.
- Place the blade of grass as tightly as you can between the 2 sticks lengthways, so that you can see it in the 'window' you cut out using the knife.
- When you are happy that the grass is tight, wrap an elastic band on each end of the wood to hold the 2 sticks together and keep the blade of grass tightly in place.
- Finally, blow through the 'window' on to the grass using pursed lips to create a high-pitched sound.
- You have a kazoo!

       	<p>Mallet:</p> <p>Japanese folding saw, bow saw, bill hook, mallet, sheath knife.</p> <ul style="list-style-type: none"> • Use a Japanese folding saw to saw a piece of wood approximately 25 - 30 cm long and the width of a standard coffee mug. • Mark (using a pen) approximately half way up the wood and draw all the way around. • Create a stop cut by sawing in to the wood on the markings approximately 1cm on all sides. • Stand the piece of wood on a solid surface with the end you are going to use as the handle at the top. • With a partner, use a bill hook and mallet to split the wood to the stop cut on each side to create a handle. • Remember to start gently as you don't want to break through the stop cut. • Using the bill hook, make small notches at a 45 degree angle down the handle. • Chip at these notches using the bill hook (facing straight down) to break the fibres of the wood and create a more recognisable handle. • Use the sheath knife to smooth the bottom edge of the handle. • You now have a mallet!
	<p>Letter opener:</p> <p>Loppers, sheath knife.</p>



- Use loppers to chop a straight piece of wood approximately 10 - 15cm long and the width of a 2p piece.
- Half way down the piece of wood, score the bark all the way around the centre using the sheath knife.
- Approximately 1cm below this, score the bark again all the way around the centre using the sheath knife.
- Remove the bark from inside the scored area.
- Decide which end will be the handle.
- At the bottom of the handle, score the wood all the way around approximately 2-3cm from the end using the sheath knife.
- Remove the bark to create the butt of the handle.
- Use the sheath knife to carefully round the butt of the handle.
- Once you have created a handle, hold the wood by the handle and point towards the ground on to a solid surface.
- Ensuring all limbs are behind the area the knife will be moving in, shave the bark to a flattened point on the top and bottom to create a sharp edge that could open a letter.
- You have a letter opener!



Picture frame:

Loppers, string, scissors.

- Find or chop 4 sticks approximately the width of a lp piece and lay out as a square or rectangle dependent on size of the sticks.
- Hold 2 of the sticks together at a right-angle, approximately 2cm in from the top edge of each stick.
- Use square lashing to join the 2 sticks together at a right-angle.
- To square lash:
 - Firstly, join the sticks together using a clove hitch.
 - Go over and under the sticks 3 times in a figure of eight motion.
 - Next, use frapping to secure the sticks by circling round the middle of the lashing 3 times.
 - Tie off the end with a reef knot.
 - Cut away any excess string.
- Repeat the square lashing on each corner until you have a square or rectangular frame.
- You now have a picture frame to fill with beautiful, natural artwork!

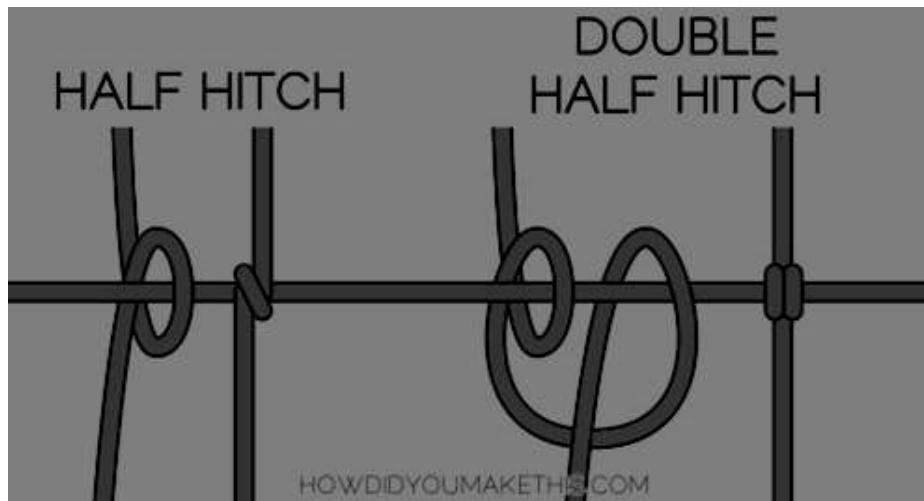
Knots

Building and constructing useful items and dens may require joining a number of materials together. At St Joseph's Forest School, the children will be given the opportunity to learn a number of useful knots for binding things together. Some of the many knots in the world are listed below.

All the below are best learnt through hands on experience and repetition but some short guides are below to help you get started.

Half hitch

- A half hitch is not secure on its own but a useful component of many other knots.
- 2 half-hitches (double hitch) make a useful knot for tying a rope to a tree - this is also commonly called a clove hitch.



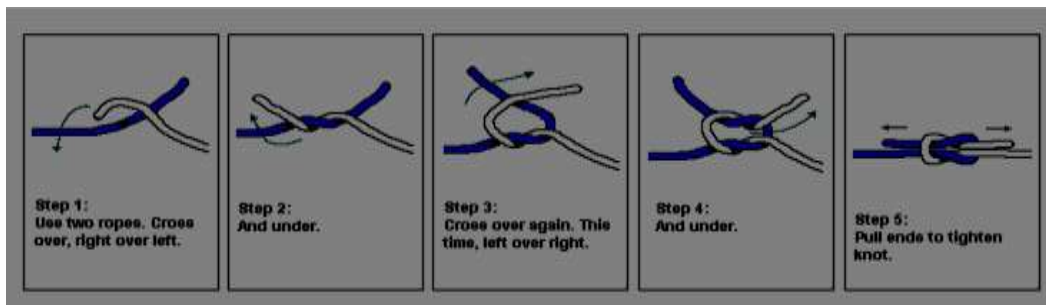
Reference: <http://howdidyoutmakethis.com/half-hitch-and-double-half-hitch-knots/>



Reference: <http://www.wearethemodels.co/wiring/clove-hitch-knot-diagram.html>

Reef knot (also called square knot)

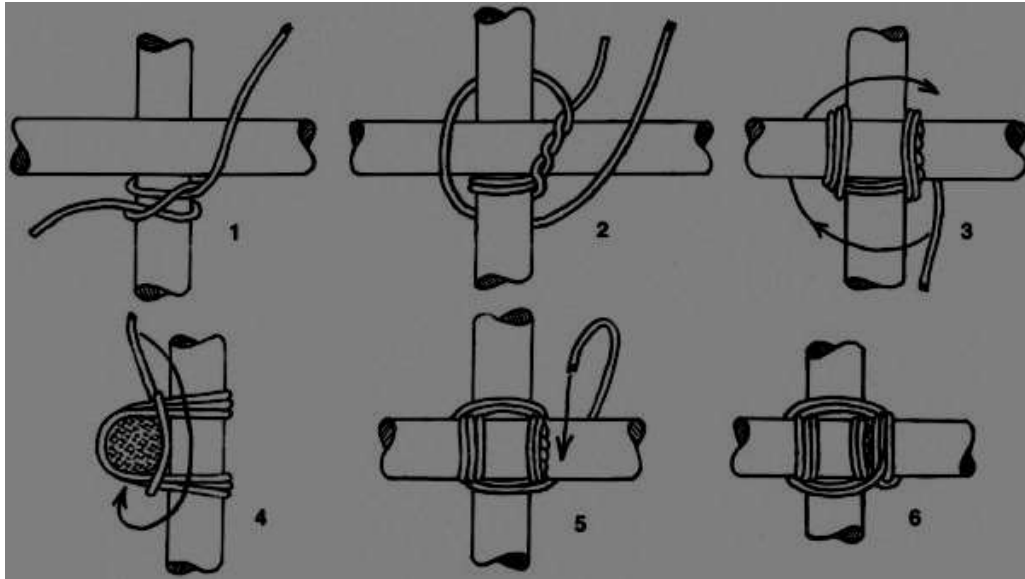
- Quick and easy to tie.
- Can be used for tying 2 ropes together but should not be relied upon for safety. For example it would be suitable for using for most purposes in a Forest School but would not be safe to use in mountaineering.
- Take caution when tying as it is very similar to a granny knot but a granny knot can come undone very easily.



Reference: <http://scarlettentertainmenthsc2012.blogspot.co.uk/p/staging.html>

Square lashing (including frapping)

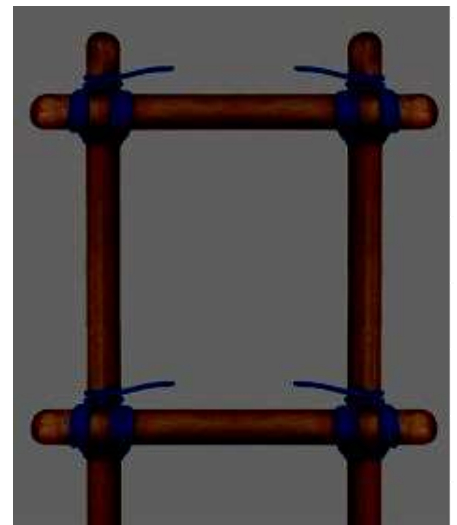
- Used to tie two poles at 90 degrees to each other.
- Useful for making a stretcher frame, camp chair, bed or ladder.
- To square lash:
 - Firstly, join the sticks together using a clove hitch.
 - Go over and under the sticks 3 times in a figure of eight motion.
 - Next, use frapping to secure the sticks by circling round the middle of the lashing 3 times.
 - Tie off the end with a reef knot.
 - Cut away any excess string.



Reference: <http://www.instructables.com/id/Basic-Cube-Structure>

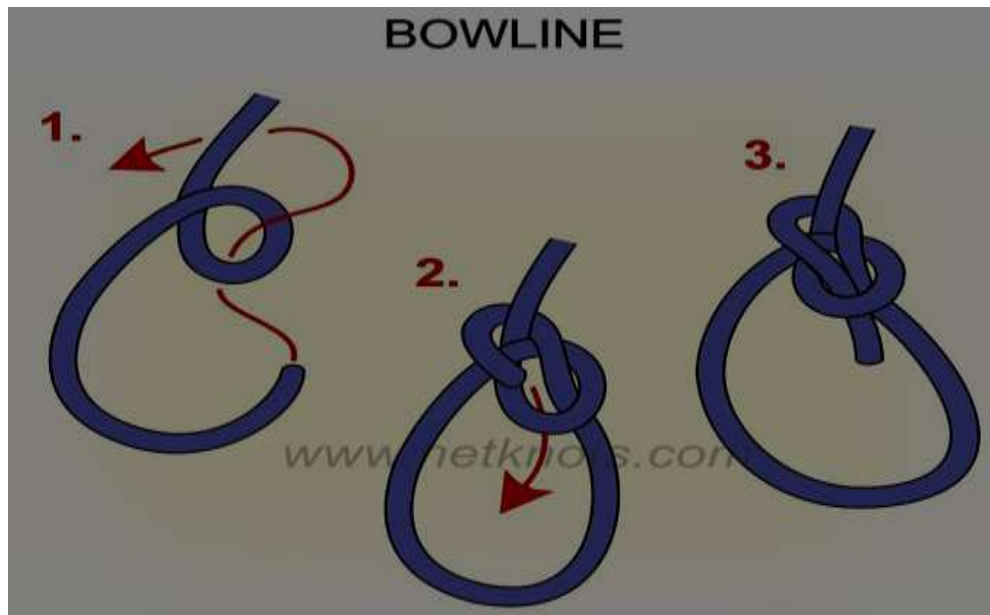
This is an example of square lashing to make a frame. The reference below illustrates this via animation in an easy to follow format if you go online to view.

Reference: <http://www.animatedknots.com/lashsquare/>



Bowline

- Useful for making a secure loop in the end of a rope.
- Under load it is secure and binding and without load it is easy to untie.
- 2 bow lines can be used to join two pieces of rope together.



Reference: https://www.netknots.com/rope_knots/bowline

Other useful websites for knot tying (including video animations):

- <http://www.animatedknots.com>
- <https://www.netknots.com>
- App: <http://knots3d.com/>

Den and Shelter Building

Building dens outside can be full of wonder and excitement for children, even in the worst weather conditions. The den can be for themselves, or for an animal or even a mini-beast. Natural resources are readily available but on occasion tarpaulin and string may be used to give a helping hand.

A natural den

Natural dens can take many forms. Two of the most common are teepee (or tent shape) and lean-to style dens made from larger pieces of wood, moss, mud and leaves. These can be effective in keeping relatively dry if needed!

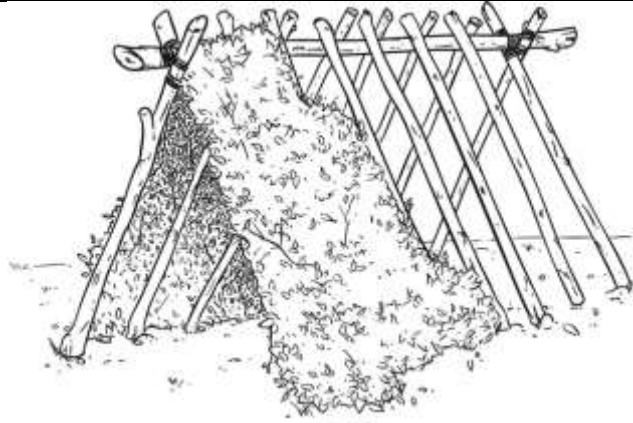


Above is a shelter we created using natural materials.

Some styles of natural shelters are shown below:

A-Frame shelter

This shelter is useful for keeping dry and out of the wind and can generally be built large enough to sit up in. You will need access to a number of large, sturdy sticks and plenty of moss, mud and leaves to pack the frame.

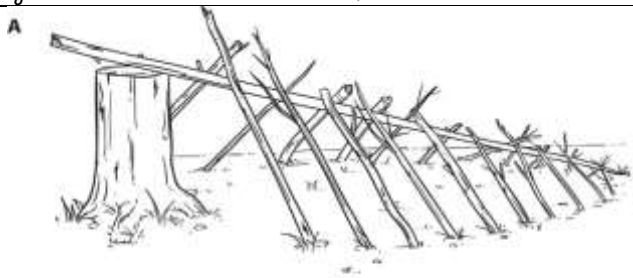


<https://gearpatrol.com/2014/11/11/wilderness-guide-to-natural-shelters/>

Debris hut shelter

This shelter is useful to stay out of the wind and rain if you need to lie down or have height restrictions on what you can build, due to the materials available.

You will need one long large stick and something to lean it on (i.e. a tree stump). You will also need lots of leaves, mud and moss to pack the frame.

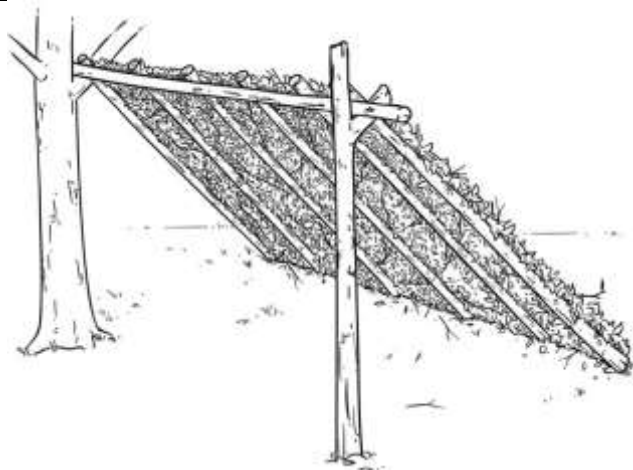


<https://gearpatrol.com/2014/11/11/wilderness-guide-to-natural-shelters/>

Lean-to shelter

This is one of the most common and basic shelters to build and it can protect you from the wind and rain, as long as placed in the correct direction.

You will need a large, sturdy stick to create the crossbar (as you could lean against two trees, and then some long sticks to create the frame. It is possible to add sides to this design also using sticks, leaves, moss and mud.



<https://gearpatrol.com/2014/11/11/wilderness-guide-to-natural-shelters/>

Round lodge shelter

This shelter is more labour-intensive but could be worth it if you are planning on staying in one location for a longer period of time. Ideally you will build it large enough to stand up in.

You will need access to a large number of long and sturdy sticks to build this frame and it can be packed with leaves, mud and moss.



<http://www.truthsurvival.com/how-to-build-a-survival-shelter/>

Ramada shelter

This shelter is useful for keeping out of direct sunlight on hot days. It creates a layer of shade that you can move around in.

You will need access to long, sturdy sticks and materials such as mud, leaves and grass to build a roof. Again, this is quite labour-intensive but useful if you need a larger space to move around in while staying out of the sun.



<http://www.diysurvival.co/top-15-shelters-all-survivalists-should-know/>

Tarpaulin and string shelter

Sometimes in England, the weather can be particularly challenging and we can make use of natural and man-made resources to create a shelter. Tarpaulin and string are all you need in a woodland to create a dry space for yourself and your team.



Above is an improvised way to create a tarpaulin shelter using string, a tarpaulin and some knots (reef and clove-hitches).

Below are some other examples of shelters using a tarpaulin:

Wedge tarp shelter

This is simple to build and allows rain to slide off to the ground, leaving a dry space inside to lie down.

This can also be useful in windy areas as it is low to the ground and preferably held down by rocks or tying to something securely.



<https://www.outdoorlife.com/photos/gallery/hunting/2013/05/survival-shelters-15-best-designs-wilderness-shelters#page-11>

Wing tarp shelter

This is useful for keeping rain or sun off larger areas, as it is built higher up. Therefore you should be able to move around underneath it.

It is more challenging to build than some others, but has lots of slopes for rain to fall off, although no sides make it less useful in the wind.



<https://www.outdoorlife.com/photos/gallery/hunting/2013/05/survival-shelters-15-best-designs-wilderness-shelters/#page-11>

Teepee tarp shelter

This can be altered in size to suit more than one person if needed and relies on some large sticks being found. It does leave a gap in the top that rain could come through but also means you could have a fire (a safe distance from the front door) and any smoke that enters should leave through the top.



<https://www.pinterest.com/pin/412572015849401305/>

Hammock tarp shelter

If you need to sleep and the ground is wet or full of wildlife, this simple shelter is made using 2 strong trees. Ensure your knots are secure.



<https://www.outdoorlife.com/photos/gallery/hunting/2013/05/survival-shelters-15-best-designs-wilderness-shelters/#page-11>

A-Frame tarp shelter

This is one of the most common tarpaulin shelters as it is quick to build and provides great protection from wind and rain. It can also be built off the ground to allow some more air inside.



<http://kayakdave.com/2012/09/10/how-to-build-a-tarp-tent-for-kayak-camping/>

Burrito Tarp

This shelter can be created extremely quickly and requires just the tarpaulin and your own weight to become secure.

However as there is not much space for ventilation, this should only be used temporarily as you will get wet from condensation.



<https://www.outdoorlife.com/photos/gallery/hunting/2013/05/survival-shelters-15-best-designs-wilderness-shelters/#page-11>

St Joseph's Catholic Primary School Forest School Policies

All policies below are required for us to run our own Forest School on-site at St Joseph's. Please note that the existing school policies that are in place are to be followed at all times. Any amendments or additions that have needed to be made are detailed below.

All current school policies can be found online at:

http://www.st-josephs-malmesbury.wilts.sch.uk/?page_id=206

Behaviour Policy -

http://www.st-josephs-malmesbury.wilts.sch.uk/wp-content/uploads/2016/12/Behaviour_v7.pdf

Safeguarding and Child Protection Policy -

<http://www.st-josephs-malmesbury.wilts.sch.uk/wp-content/uploads/2016/12/Safeguarding-and-child-protection-policy-Version-13.pdf>

Anti-bullying Policy -

http://www.st-josephs-malmesbury.wilts.sch.uk/wp-content/uploads/2016/12/Anti_Bullying_v3.pdf

Complaints Procedure -

<http://www.st-josephs-malmesbury.wilts.sch.uk/wp-content/uploads/2016/12/Complaints-Procedure-V5.pdf>

Special Educational Needs Policy -

<http://www.st-josephs-malmesbury.wilts.sch.uk/wp-content/uploads/2016/12/Special-Educational-Need-Policy-2016.pdf>

Health and Safety

The primary role of any teacher is to keep all pupils under their supervision safe for the time they are under their care. Forest School can offer a very different set of challenges in regard to this so every step must be taken to ensure that a safe and secure environment in which to learn is achieved.

Therefore a full risk assessment of each site and activity (where required - e.g. using a tool) will be in place prior to a session taking place.

On hot days, children must wear sun hats and sun cream prior to being outside for each session. Children are allowed to bring in their own sun cream and put it on themselves. St Joseph's Forest School will not put sun cream on a child and reserve the right to allow that child to take part if they do not have appropriate protection from direct sunlight.

Minor Injuries

Head

Initially, the injury will be assessed by the Forest School Leader for concerning features of a head injury, or a concerning nature of how the injury occurred. In the case of a head injury, the injured party will be checked for competence, headache, dizziness, feelings of nausea and blurred vision. If the Forest School Leader deems the person to be fit to continue then they will be monitored for the rest of the session and their parent will be spoken to on pick up or a note will be sent home. All head injuries will be written down in the accident report book and a copy will be kept by the school.

Non-head

Initially, the injury will be assessed by the Forest School Leader. If the child appears fine after some initial checks, minor first aid may be administered if required (e.g. anti-bacterial wipe, plaster, ice-pack, etc...). If the Forest School Leader deems the injury to be minor and the first aid is sufficient for the child to continue, there will not be a requirement to write a note to the parents or record in the school accident book. Where possible, the Forest School Leader will aim to speak to the parent collecting the child who received treatment.

If the injury is minor (i.e. non-emergency) but requires extended treatment or where the injury has left a mark or caused continued limping for example, the Forest School Leader will speak to the parent of the injured party or send a note home, and will record the incident in the school accident book.

Medication

If a child has a prescribed emergency medication that should be available to them at all times (e.g. inhaler, epi-pen, etc...), then it will be taken with the child to the Forest School site and stored in the main Forest School shelter. In the event of a child requiring their medication, it will be administered as per the prescription/administration directions, under adult supervision.

The Forest School Leader (and other supervising adults) will have access to a list of all children requiring (or potentially requiring) medication. A list of children with special educational needs (SEN) will also be available to the Forest School Leader and any supporting staff.

Cancellation

St Joseph's Catholic Primary School Forest School will take place in all weather conditions that it is safe to do so. High winds are most likely to cause cancellation due to the chance of falling branches and other debris.

In the unlikely event of cancellation, as the Forest School takes place within normal school hours, the children will be provided with an alternative task on the playground, hall or in class, supervised by the Forest School Leader. Every effort will be made to replace the session at a later date if the school and Forest School Leader's timetable allows.

Transport

St Joseph's Catholic Primary School Forest School will take place within the school grounds so all transport will be on foot.

In the event of an activity or session taking place off-site but close to the school, the Forest School Leader will arrange for the relevant adult to pupil ratios to allow the group to walk to this new location.

In the event of an activity or session taking place off-site but not within walking distance of the school, a coach and driver will be booked and all adult to child supervision ratios will be met and arranged by the Forest School Leader.

Use of Photographs and Video

Photographs and videos may be taken by the Forest School Leader, other supervising adults or Forest School Captains for recording, observation or displays around the school premises. If a child's parents have opted out of allowing their child's image to be taken for any reason, the image will not be used and then deleted.

Social Media

On occasion, the school may wish to use an image, images or video of the children taking part in Forest School. If a child's parents have opted out of allowing their child's image to be used for any reason, the image will not be used on these platforms and will be deleted.

Missing or Lost Child

Children will be registered by the Forest School Leader, in their own classroom, prior to taking part in any Forest School session.

St Joseph's Catholic Primary School Forest School on-site area is surrounded by fencing on all sides. Prior to each task, a suggested time frame will be advised to the children and a meeting point upon completion of the task will be agreed (normally the main Forest School shelter area).

The children will routinely be brought back to the main Forest School shelter or other meeting point for further instruction (if needed) or reflection time. Should a child appear to be missing an emergency whistle will be blown twice to indicate to this child to return to the agreed meeting point.

Should the child still not return, the Forest School Leader will contact the school office by walkie-talkie to send support to the site. The Forest School Leader will leave an adult in charge of the group if safe to do so and begin a search of the Forest School area.

The Forest School leader will keep in contact with the school office via walkie-talkie until the situation is resolved.

Should the child still not be found, the matter will be passed to the Head Teacher to contact the relevant people or authorities.

Playwork Policy

This policy is based on the Playwork Principles that were updated in 2005 (Playwork Principles Scrutiny Group, Cardiff, 2005) and aim to promote a recognition that a broad range of environments and play opportunities are essential in the positive development of children. I have discussed how they will be incorporated into Forest School.

1. The impulse to play is innate and all children need to play. It is fundamental to the development and well-being of individuals and communities.

Forest School promotes an ethos of the importance of play and play will be incorporated into every lesson, irrespective of age.

2. Play is a process that is freely chosen, personally directed and intrinsically motivated.

Forest School strives to promote imagination and creative thinking and for the children to be their own leaders, letting the natural environment and how it affects them be their guide. Play will be child led as often as possible.

3. The essence of playwork is to support and facilitate the play process.

During Forest School lessons, play can remain the focus and education can follow with it rather than educational theory being the focus and trying to fit a play activity around it. This prevents quashing of the imagination and encourages the children to fully explore their ideas.

4. The play process takes precedence and playworkers act as advocates for play when engaging with adult led agendas.


The Forest School leader will ensure that all helpers are aware of this ethos and that the activities remain child led as often as possible, stepping in where necessary to ask adults to stand back.

5. Role of the playworker is to support all children in the creation of a play space.

The Forest School leader will ensure that the play area is safe and allows the children to fully maximise their potential for play prior to the session so that when play starts it can be free flowing and uninterrupted. Ideas rather than instructions can be provided to help them to explore their imaginations.

6. The playworker's response to play is based on an up to date knowledge of the play process.

The Forest School leader will be responsible for ensuring that their knowledge is kept up to date and is reflected in their lesson plans. Evaluation of lessons after



they have taken place is important to make alterations and improvements when necessary.

7. Playworkers recognise their own impact on the play space and also the impact of play on the play worker.

The Forest School Leader will ensure that when appropriate the adult presence does not halt the creative play process. This can be encouraged by the children seeing the adults playing and so therefore feeling more comfortable doing so too; adults will be leading by example. It is important for the Forest School Leader to be aware that it may be difficult/feel unnatural for adult helpers to engulf themselves fully in play initially and they will need support to be able to do this.

8. Playworkers choose an intervention style that enables children to extend their play, balancing risk with the developmental benefit of the children.

The Forest School leader is responsible for recognising the direction that the lesson may naturally be taking from the children and adapting their agenda if necessary and felt appropriate to do so to prevent the interruption of the play process. They are responsible that any risks of doing so are evaluated and balanced against the positive impact for the children.

Support Staff Policy

Creating a positive learning environment for support staff

At Saint Joseph's we aim to have an awareness of the needs of others and to find time to make both adults and children feel valued within a secure and caring environment. It is important for the Forest School Leader to ensure that support staff feel confident and prepared for a session and that they are able to manage unexpected situations to the best of their ability. This includes disruptions in behaviour.

- Wherever possible support staff will be kept consistent.*
- They will have access to all the policies of the school and the Forest School handbook and will be required to read this prior to attending any lessons.*
- The Forest School leader will ensure support staff feel prepared for the lesson ahead. This may mean receiving a copy of the lesson plan beforehand and will always include a pre-lesson briefing.*
- Support staff will be present for all relevant safety talks before the lesson begins.*
- The Forest school leader will be responsible for dealing with any concerns that the support staff member may have and equally the support staff will be responsible for ensuring they report promptly to the Forest School leader if they have any concerns.*



Inventory

(Correct as of January 2018)

2 x large tarpaulin

1 x knife sharpening stone

15 x fixed blade sheath knives

6 x bow saws

2 x spare bow saw blades

20 x pairs of small garden gloves

3 x pairs of large garden gloves

4 x pairs of fire gloves

19 x pairs of scissors

5 x spare drill bits

1 x large packet of rubber bands

1 x secateurs

6 x twine reels and twine

5 x hand drills

12 x palm drills

1 x can of oil

1 x hammer

1 x folding grill

15 x blindfolds

2 x long-handled frying pans

11 x flint and steel

2 x lighters

2 x grill lids

4 x Kirtley Campfire Kettles

5 x Kelly Kettles

1 x Fire Blanket

7 x Fire Bowls

Large bag of tinder, matches,
Vaseline and cotton wool

1 x Scan first aid kit

First Aid Kit Contents:

- **Gloves**
More quantity reflecting the need, and Nitrile type in line with NHS and St. John Ambulance guidelines.
- **Plasters**
Sensible quantities, reflecting consumer demand.
- **Wipes**
Increased quantities, reflecting consumer demand. New specification is sterile and now must meet the European CE marking rules.
- **Triangular Bandages**
Quantities are reduced reflecting the change in training first aid protocol, where immobilisation of lower limbs using triangular bandages is no longer indicated.
- **Finger Dressings**
A smaller finger dressing is introduced specifically for finger injuries that are too large for first aid plasters, dressing complete with an easy-fix adhesive tab.
- **Medium & Large Dressings**
Fewer quantities, reflecting consumer demand.
- **Clingfilm**
The NHS recommends applying clingfilm (in layers rather than wrapped around) to burns following treatment with running water for 10 - 15 minutes (<https://www.nhs.uk/conditions/burns-and-scalds/treatment/>)
- **Shears**
Clothing around wound sites needs to be removed to allow first aid treatment. Shears, capable of cutting fabric and leather enable this removal.
- **Adhesive Tape**
Many first aiders prefer not to use safety pins, where additional injury could potentially be caused. Adhesive tape is an easy and inexpensive way to secure dressings and bandages. Safety pins are retained, allowing users a choice of application.
- **Foil Emergency Blanket**
Clinical shock presents one of the most serious life threatening risks to a casualty, treatment includes keeping the casualty warm. The introduction of the foil survival blanket enables this.
- **Mouth To Mouth Resuscitation Device**
The introduction of a mouth to mouth resuscitation device, incorporating a one way valve, protects the first aider from infection from body fluid pathogens.
- **Eye Wash**
Incorporated into the travel kit since fixed eye wash stations are unlikely to be available. The environment of a travelling worker is unpredictable and could include a risk to eyes.
- **First Aid Guidance Leaflet**
Conforming to the latest HSE guidance.

