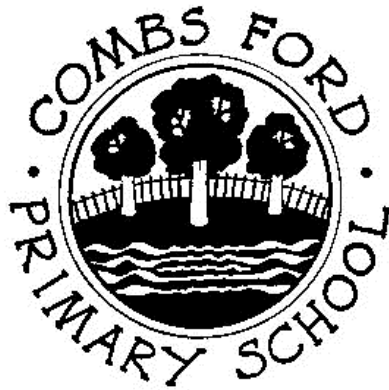


Combs Ford Primary School

Health and Safety Code of Practice

Ropes and Knots



Successful Learners ~ Confident Individuals ~ Responsible Citizens

Declaration

This Code of Practice is for all adults who support regularly Combs Ford Primary School Forest School sessions and must be read as part of their induction process. A copy is always available in the woodland for reference. This Code of Practice is based on documentation from Suffolk Wildlife Trust as recognised experts in Forest School training and delivery.




Updated On:	12 th October 2024
Updated By:	Kathryn Day (Headteacher and Forest School Leader)


Essential Requirements




- Adhere to the adult to child supervision ratios based on the age, ability and behaviour of the group.
- Qualified First Aider present (refer to the *Accident and Emergency Procedures (Including First Aid)* in the *Combs Ford Primary School Forest School Handbook* and the [First Aid Policy \(CET\)](#)).
- Hand-held radios for calling for support and the Emergency Service are always charged and in the woodland during Forest School sessions.
- *Risk-Benefit Assessments* for *Ropes and Knots* are in place and adhered to.
- Guidance in the [Health and Safety Policy \(CET\)](#), [Child Protection and Safeguarding Policy \(CET\)](#), and [First Aid Policy \(CET\)](#) must be followed.
- Staff and volunteers must have received relevant training and be suitably experienced in the activity.
- Where necessary, appropriate Personal Protective Equipment (PPE) must be supplied and used.



Checking, cleaning, maintaining and storing ropes and cords for Forest School.	
Check:	<ul style="list-style-type: none"> • Check for knots, bumps or kinks – you can do this while you're coiling them to put away. • Don't use for weight-bearing if frayed.
Clean:	<ul style="list-style-type: none"> • Wash in cold water. • If really dirty, a gentle fabric soap could be used but this needs to be rinsed out of the ropes.
Maintain:	<ul style="list-style-type: none"> • Keep ropes away from heat, chemicals, and abrasive surfaces. • You can seal the frayed ends of synthetic ropes with a flame (lighter) or in the fire. • Ropes made of natural fibres need whipping with twine or wrapping in tape. • Don't use frayed ropes for weight-bearing.
Store:	<ul style="list-style-type: none"> • Make sure that you dry your ropes if they get wet before storing them – ropes made from natural fibres will start to rot if they're left out in the wet or stored damp. • Coil ropes to store them. • Store ropes at room temperature in sealed plastic box where they won't get damp or be eaten.
Rope Types:	<ul style="list-style-type: none"> • Dynamic ropes have 'give' in them – static ropes don't stretch. • Hemp and polyhemp ropes are quite rough – synthetic ropes are smoother. • We use dynamic 12-stranded synthetic rope.
General teaching tips when tying knots with groups relating to the Forest School ethos and pedagogy, age and developmental stage of participants:	
<p>Top Tips for Knots at Forest School</p> <ul style="list-style-type: none"> → Teach children knots when there is a need, i.e. a purpose or application, or when the children are interested. → Know how to tie right-handed or left-handed. → Observe learners' way of tying knots and adjust accordingly. → Use the ground as a platform. → Think about size – the bigger the rope, the easier it is to tie as it's braided or woven. → Use visual guides. → Use stories or songs. <p>Why Do We Use Knots?</p> <ul style="list-style-type: none"> → Health and safety → Hanging things → Shared experience → Useful → Fun! <p>Health and Safety</p> <ul style="list-style-type: none"> → Make sure that ropes are secured onto strong, healthy, living trees and branches which will take the weight of the users – avoid dead trees and branches as they won't be weight-bearing. → Make sure that weather conditions are suitable for rope use – don't use in high winds. → Clear the ground of debris and designate a specific area for the activity which is clear of other activities and people. → Set clear rules with children and adults on how to safely take part in rope activities. → Mark ropes for length, e.g. 1 line for 10m, 2 lines for 20m, and so on – then you can use the right rope for the job. 	





Overhand Knot (AKA Pineapple Knot)		
Use for this Knot:	→ Tie two ends together to hang medallion from.	
How to Tie this Knot:	<ol style="list-style-type: none"> 1. Hold the ends of the cord together. 2. Make a loop. 3. Pass the ends through the loop. 4. Pull tigher. 	
Teaching Tips e.g. Stories, Easy Ways to Remember:	→ It looks like a pineapple...	
Timber Hitch		
Use for this Knot:	→ Securing one end of a rope to a tree to: <ul style="list-style-type: none"> ○ Hang a tarpaulin for a shelter – a round turn and two half hitches secures the other end. ○ Hang a hammock. ○ Secure balance rope – a tensioning loop secures the other end. ○ Wrapping around log to take it for a walk. 	
	<p>Tarpaulin ↑</p>	<p>Hammock ↑</p>
How to Tie this Knot:	<ol style="list-style-type: none"> 1. Pass the end of the rope around a tree trunk – make sure you leave a long end to give yourself plenty of rope to play with. 2. Cross the end over itself – this is essential for the knot to work. 3. Now tuck the end under itself. 4. Keep doing these turns to form a series of tucks around the rope – do at least 4 to 5. Friction against the bark keeps it in place. 5. Pull hard on the main length of rope to tighten it. 	
Teaching Tips e.g. Stories, Easy Ways to Remember:	The Snakey Knot → The snake goes around the tree. → Whe it meets its own tail it gates scared and runs away from it. → It wraps itself around its own body in terror.	
Health and Safety	Hammocks <ul style="list-style-type: none"> • Make sure an adult tests the hammock before use. 	



<p><u>Round Turn and Two Half Hitches</u></p>		
<p>Use for this Knot:</p>	<p>→ Securing one end of a rope to a tree to:</p> <ul style="list-style-type: none"> ○ hang a tarpaulin for a shelter; ○ Hang a hammock; ○ Seure balance ropes; ○ Wrapping around log to take it for a walk <p>→ A timber hitch secures the other end.</p>	
	 <p>Tarpaulin ↑</p>	
<p>How to Tie this Knot:</p>	<ol style="list-style-type: none"> 1. A round turn wraps the rope around the tree trunk – completely encircling. Do this twice. 2. The two half hitches secure the end around the rest of the rope – by coming around the front of the rope and then behind and through the loop you have just created. 3. This is done twice. 4. Remember to tighten between each half hitch. 5. You can add as many turns and half hitches as you want to secure your rope. 	
<p>Teaching Tips e.g. Stories, Easy Ways to Remember:</p>		

<p><u>Lark's Foot</u></p>		
<p>Use for this Knot:</p>	<p>→ To secure a medallion to a cord.</p>	
<p>How to Tie this Knot:</p>	<ol style="list-style-type: none"> 1. Double a length of cord to form a loop. 2. Pass this up through the hole or around the rope (from back to front). 3. Make sure the loop is nice and wide and sits either side of the long ends of the cord. 4. Pull both parts of the rope through the loop and tighten. 	
<p>Teaching Tips e.g. Stories, Easy Ways to Remember:</p>	<ul style="list-style-type: none"> • Looks like a pretzel! 	

<p><u>Prusik Loop</u></p>		
<p>Use for this Knot:</p>	<p>→ To secure a tarpaulin to a rope to stop it sliding.</p>	
<p>How to Tie this Knot:</p>	<ol style="list-style-type: none"> 1. Start with a Lark's Foot. 2. Double a length of cord to form a loop. 3. Pass this up through the hole or around the rope (from back to front). 4. Make sure the loop is nice and wide and sits either side of the long ends of the cord. 5. Pass up through the hole or around the rope (from back to front) again. 6. Pull both parts of the rope through the loop and tighten. 7. If using with a tarpaulin, reef knot to tarpaulin. 	
<p>Teaching Tips e.g. Stories, Easy Ways to Remember:</p>	<p>→ Looks like a pretzel!</p>	
<p><u>Clove Hitch</u></p>		
<p>Use for this Knot:</p>	<ul style="list-style-type: none"> • Securing a cord or rope to a pole before starting to square lash. • Joined and Woven Crafts, e.g. Picture Frame, Tongs. 	
<p>How to Tie this Knot:</p>	<ol style="list-style-type: none"> 1. Form a loop in the working end of the rope. 2. Place it over the pole. 3. Form a second loop identical to the first. 4. Place it over the pole and tighten. 	
<p>Teaching Tips e.g. Stories, Easy Ways to Remember:</p>	<p>Bunny ears.</p>	

<p><u>Square Lashing</u></p>		
<p>Use for this Knot:</p>	<ul style="list-style-type: none"> • Used to hold two poles at a 90-degree angle to one another. • Joined and Woven Crafts, e.g. Picture Frame, Tongs. 	
<p>How to Tie this Knot:</p>	<ol style="list-style-type: none"> 1. Place two poles at a 90° angle to each another. 2. Attach the cord or rope to the first pole with a clove hitch. 3. Twist the short end around the long end and wrap the rope around both poles alternately going over and under each pole about 3 or 4 turns. 4. Tighten the lashing by surrounding it with 3 or 4 frapping turns. 5. Finish with 2 or 3 tight half hitches. 	
<p>Teaching Tips e.g. Stories, Easy Ways to Remember:</p>		

<p><u>Alpine Butterfly</u></p>		
<p>Use for this Knot:</p>	<p>→ An Alpine Butterfly keeps its tension but is easy to undo. → Used as part of a tensioning loop to secure a balance line or rope bridge. → Making a swing.</p>	
	 <p>Balance Line ↑</p>	 <p>Rope Bridge ↑</p>
<p>How to Tie this Knot:</p>	<ol style="list-style-type: none"> 1. Hold rope over bottom of hand and wrap 3 times, working upwards towards fingers. 2. Hook end over little finger. 3. Pull middle loop up behind to loop and form a mountain. 4. Pull the mountain fown over the loops to form a valley. 5. Pull the bottom loop up and under the palm loops. 6. Keep hold of the top loop, pull hand out and tighten. 	
<p>Teaching Tips e.g. Stories, Easy Ways to Remember:</p>	<p>Up the mountain, down the hill.</p>	
<p>Health and Safety</p>	<p>Rope Swing</p> <ul style="list-style-type: none"> • Mark a boundary around the site of the rope swing. Individuals only cross the boundary when it is their turn on the swing so as to prevent collisions. 	

<p>Tensioning Loop</p>		
<p>Use for this Knot:</p>	<p>→ To secure a balance line or rope bridge – timber hitch at the other end.</p>	
<p>How to Tie this Knot:</p>	<ol style="list-style-type: none"> 1. Tie one end of the rope to a suitable tree using a Timber Hitch. 2. Tie an Alpine Butterfly in the rope about 1-2m from the second anchoring tree. 3. Wrap the rope around the tree and thread the end through the loop of the Alpine Butterfly. 4. Pull tight! 5. Pull tight again – using your foot against the tree to create tension. 6. Wrap around the tree again and loop over ropes. 7. Pull tight again. 8. Do this 3 or 4 times until the rope is tight. 9. Finish off with 2 or more half hitches. 	
<p>Teaching Tips e.g. Stories, Easy Ways to Remember:</p>		