



# Orienteering

Suitable for Key Stage 2 and above

## Information for teachers using Silk Wood orienteering courses

An orienteering course involves participants navigating around a course of 'controls' using a map. Controls must be visited in a given order, although participants decide on and follow their own route. This pack includes the information necessary to ensure a safe and successful orienteering experience at Westonbirt.

### The Controls

Westonbirt has three permanent orienteering courses situated in the Silk Wood area of the arboretum. Each course comprises of a number of fixed controls, which consist of a letter and a leaf shape.



**A sample Control**

Students collect a letter and/or identify the leaf to show they have visited the correct locations in the right order. In addition to mapping skills the orienteering course can be used to support teaching native tree identification.

## The Courses

Our three courses aim to provide students with a safe introduction to orienteering – while also encouraging further exploration of the arboretum. They range from a short, easy course to more challenging routes for older and more able students. It is important to pick an appropriate course for your students.

All courses start from the two large beech trees on the track down towards Waste Gate (C1 is fixed on this gate).

### Easy course

1.3km. Controls located on paths or wide rides with short distances between each control. It requires basic understanding of map orientation and common map symbols. Suitable for Y3 and Y4

**Time:** 20-40 minutes

#### Points to watch:

- \* When approaching C2 up the forest road, students should look to turn off left onto a grass ride (up a slight incline) – MARSHALL POINT
- \* At C5, care should be taken to ensure students head towards C6 – MARSHALL POINT
- \* C6 is not visible from C5 – MARSHALL POINT

### Medium course

2.4Km. Controls on or near paths. Requires good map orientation skills and understanding of some map symbols. Suitable for Y5 and Y6

**Time:** 45 minutes – 1 hours

#### Points to watch:

- \* At C13 it is important that students turn up Broad Drive (slight incline) – MARSHALL POINT
- \* When approaching C6 from C7, it can be hard to locate as it is out of view – MARSHALL POINT
- \* The distance between C12/C10 is longer than between the other controls on the medium course

### Long course

4km. Our most challenging course. Some controls located away from paths and in more isolated areas of the arboretum. It requires good map orientation skills and understanding of map colours and symbols. Suitable for experienced Y6 and above

**Time:** 1 - 1½ hours

#### Points to watch:

- \* When approaching C11 from C5 route finding can be difficult (particularly as 'undergrowth moderate' and 'open with scattered trees' categories are similar) – MARSHALL POINT

- \* C9 can be hard to locate when trees are in full leaf – MARSHALL POINT
- \* When approaching C6 from C7, it can be hard to locate as it is out of view – MARSHALL POINT
- \* The route to C18 is difficult to find – MARSHALL POINT

Please note; all course distances are based on straight-line measurements between controls, and thus the distances covered by individuals to complete the courses may be considerably longer.

### **ONLY FIXED BENCHES ARE MARKED ON MAP**

### What should students bring?

The orienteering courses cover a variety of terrain, and it is therefore vital that students dressed appropriately. As a minimum students will need;

- Sensible waterproof footwear with non-slip soles
- A waterproof coat
- Clothing appropriate to weather conditions – jumper, hat and gloves in the winter, sun hat and sun screen in summer
- A drink and snack

In addition students will need;

- A pen or pencil and clipboard
- At least one watch between two pupils.

A compass is not necessary for successful completion of our courses.

### Before your visit

Students will need a basic understanding of orienteering before they arrive at Westonbirt. It would be useful for students to have knowledge of the following:

- Map colours and symbols
- Map scale, the map they will be using is 1:5,000 (1cm on the map = 50m on the ground)
- Map set to features on the ground

### Ideas for novice groups

- For novice groups walk them to C1 rather than starting under the 2 beech trees – this allows the students to see what a 'control' plaque looks like.
- Instead of sending pairs out split them into groups of 5-6, each with an adult. Each student can navigate between a control.

### Things to cover on arrival at Westonbirt

Cover the following, as appropriate, with students before they start.

- Basic map colours, symbols and scale
- Map setting
- It is useful to do a 'map walk' with students to check understanding of and reinforce the above points

- Explain about control points. The map includes a 'control card' for students to record the letter codes for each control visited, alternatively there is a separate worksheet for recording leaf names.
- Issue at least one map per pair.
- Brief the participants about the course you expect them to follow. Suggested courses are given on the reverse of the map. **NB** Start with an easy course, if they are successful let them try a more difficult course.
- Give a time limit for the orienteering activity and a meeting point.
- Brief participants on what to do if they get lost. Highlight the perimeter boundaries of the area, any out of bounds areas and hazards. All Westonbirt courses are based in Silk Wood only and students should be instructed not to cross any walls or fences.
- If you are using compasses, instruct your students to follow a due East bearing (90 degrees) if they become lost. This will bring them back to the Downs area and carp parks.

## Health and Safety

Decide group sizes. Ideally students should be sent in pairs.

Consider the health and safety issues relating to taking groups out of school and participating in orienteering activities. A sample risk assessment for the course is attached. **For further details please contact The Education Manager on 01666 881211.**

Lastly ensure that all your helpers understand their specific roles e.g. marshal exit points.

**We strongly recommend that you walk the course to familiarise yourself with locations before bringing your group.**

## Large groups

To prevent students from following one another (particularly on our shortest course or when leading a large group) try

- Sending pairs out at timed intervals e.g. one every two minutes.
- Sending half the group round the course one way and the other half in reverse.
- Using more than one course - with the most able on a more difficult course. N.B. Do not use the long and medium courses together as this can lead to confusion since both courses use Broad Drive but from different directions!

## Alternative Orienteering Activities

- Consider a timed score suitable for Y5 &6. A timed score event is when the controls are visited in any order – with the object being to collect as many as you can within a given time. One hour is a suitable amount of time.
- An alternative is a star event. In a star event students are sent off from a central point to one control at a time. After they have found each control they return to the central location to get their next control. This allows for increased safety and regular checks on student progress. It is also suitable for large groups and groups with students of wide ability (more experienced students just visit more controls). At Westonbirt you can do a star event by using C11 as a central location – sending pairs of students out to controls 2-17. Send students to one control at a time to collect the letter (or leaf). When they return they can be given a new control. By allocating a different control to each pair you

can reduce following, but bear in mind that some controls are easier to find than others  
 – ensure students are able to find the control they are sent to. N.B. make a simple chart  
 (see below) to keep track of the controls each pair has visited.

Student pairs	Control number															
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
J. Smith / P Brown		X		X												

### Further information

For information about developing orienteering in school and beyond contact the local British Orienteering Federation Schools Development Officer Celia Watkinson, Tel 0117 9688627 or email [celia.w@blueyonder.co.uk](mailto:celia.w@blueyonder.co.uk).

And finally  
 HAVE FUN!

## What are the lines and colours on the map?

As with any other map, the symbols and colours on our orienteering map represent different features in the landscape. However, although these symbols are easy to recognise they are NOT necessarily the same as those found on a standard Ordnance Survey map. It is therefore valuable to go through the map with students to ensure they understand the map before sending them out on a course.

### The Colours

There are five basic colours on orienteering maps:

- Black** Often represents 'man made' features such as buildings, walls, bins and fences. It is also used to represent rock features and boulders. Paths and tracks are also shown in black, but not roads, which are shown in brown.
- Green** Various shades of green represent different types of woodland. Often the shade of green indicates how easy or difficult it is to move through. For example, light green or white areas are suitable for running or walking through, whereas dark green areas indicate thick, dense bushes or scrub and are best avoided.
- Yellow** Indicates open areas. Bright yellow usually represents open area such as playing fields or larger open spaces. Pale yellow is often used to show thinly wooded areas or rough grassland that may be less accessible.
- Brown** Pale brown normally indicates a hard or artificial surface such as gravel, tarmac and playgrounds etc.
- Blue** As with other maps, blue represents water such as rivers, ponds, streams and lakes.

### The Lines

All orienteering maps have parallel lines drawn vertically on the map. The tops of these lines have an arrow indicating magnetic north. These lines will only be relevant if using a compass.

## The answers!

Control Number	Control Letter	Leaf
1	B	Field Maple
2	I	Hawthorn
3	O	Scots Pine
4	R	Hazel
5	T	Whitebeam
6	W	Hornbeam
7	E	Alder
8	T	Holly
9	S	Ash
10	T	Beech
11	U	Willow
12	R	Lime
13	N	Elm
14	B	Oak
15	E	Sycamore
16	M	Maple
17	R	Sweet Chestnut
18	O	Silver Birch
19	A	Horse Chestnut

### The courses

#### **Short (controls 1 – 6)**

B, I, O, R, T, W

#### **Medium (controls 1, 2, 13, 12, 10, 9, 8, 7, 6, 18)**

B, I, N, R, T, S, T, E, W, O

#### **Long (controls 1 – 5, 11, 13, 12, 14 – 17, 10, 9, 8, 7, 6, 18, 19)**

B, I, O, R, T, U, N, R, B, E, M, R, T, S, T, E, W, O, A

Short / Medium course anagram = Westonbirt

Long course anagram = Westonbirt Arboretum

## Risk Assessment for Orienteering

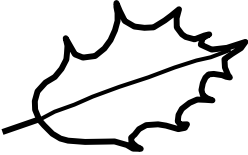



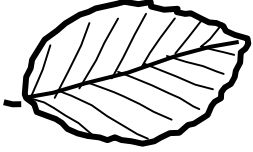
This risk assessment is provided as guidance only. It contains the specific risks associated with using the orienteering courses in Silk Wood (**NB: separate risk assessments covering the general risks associated with visiting the arboretum are also available on request**).

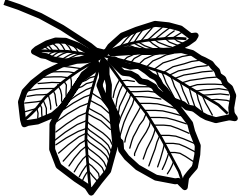

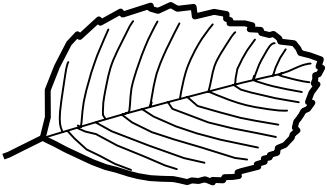
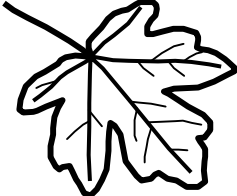

**It is your responsibility to carry out your own assessment.** For further guidance please telephone 01666 881211. We recommend a pre-visit if you are unfamiliar with Silk Wood.

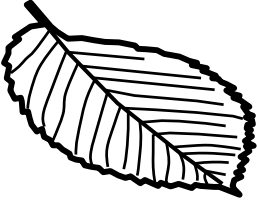
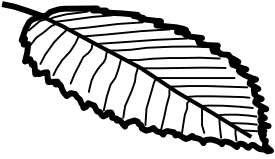
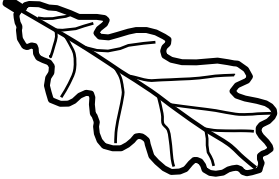
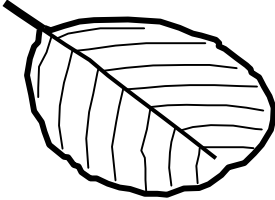
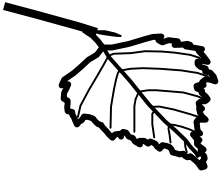
<b>Location</b>	Silk Wood, Westonbirt National Arboretum	
<b>Activity</b>	Using Silk Wood Orienteering courses	
<b>Persons at risk</b>	School children (aged 4-16) and adult helpers, school staff, members of the public, special needs groups, Westonbirt education staff	
<b>Emergency Numbers</b>		
Emergency Services	<b>999</b>	
Westonbirt Arboretum <b>(Reception)</b>	<b>(01666) 881211 (Education) 880220</b>	
Tetbury Hospital	<b>(01666) 502336</b>	
<b>HAZARDS</b>	<b>LEVEL OF RISK (LOW, MEDIUM or HIGH)</b>	
Outside Environment		
1. Terrain – trips, slips and falls	1. Low	
2. Weather	2. Low	
3. Woodland pools	3. Low	
Dogs		
1. Dog faeces	1. Medium	
2. Attack by dogs	2. Low	
Missing participants or marshals	Medium	
Supervision and personal safety	Medium	
<b>RISK CONTROL MEASURES</b>		
<b>Hazard</b>		
Terrain	<ul style="list-style-type: none"> <li>• Courses are planned to avoid steep areas.</li> <li>• Participants should be clearly briefed about steep banks in preliminary safety talk.</li> <li>• Ensure adequate adult supervision (see supervision and personal safety)</li> <li>• Students must wear appropriate shoes</li> <li>• Trail conditions are monitored regularly to ensure they are maintained, particularly after severe weather</li> <li>• In wet conditions group leader should specify that students walk rather than run around courses.</li> </ul>	
Weather	<ul style="list-style-type: none"> <li>• Participants must bring appropriate clothing and</li> </ul>	

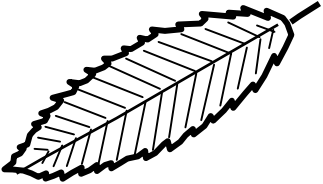

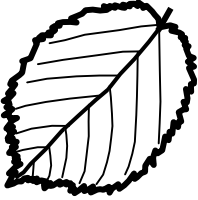

	<p>footwear – as a minimum a warm jumper, hat, gloves and waterproof coat should be brought while in the summer a water bottle would also be advisable.</p> <ul style="list-style-type: none"> <li>• Spare clothing must be brought by school leader</li> <li>• Choose an appropriate course for your group (see general guidance)</li> <li>• Participants should be clearly briefed about weather in preliminary safety talk.</li> </ul>
Woodland pools	<ul style="list-style-type: none"> <li>• Courses are planned to avoid areas with woodland ponds.</li> <li>• Guidelines will be given to groups on the importance of good hygiene when in the outside environment and particularly when near water during initial group safety talk.</li> </ul>
Missing participants or officials	<ul style="list-style-type: none"> <li>• Runners should be sent out in pairs (as a minimum). For younger groups an adult should accompany each group.</li> <li>• The perimeter of Silk Wood is defined by walls/fences and participants should be clearly briefed about boundaries in preliminary safety talk.</li> <li>• The school leader must bring a student list and monitor finishers' control cards to ensure everyone has returned.</li> <li>• Courses are graded with easier courses on main footpaths and rides. Choose an appropriate course for your group (see general guidance)</li> <li>• Ensure adequate adult supervision (see supervision and personal safety)</li> <li>• The arboretum has an emergency procedure for lost persons and this will be deployed in the event of a missing runner.</li> </ul>
Supervision and personal safety	<ul style="list-style-type: none"> <li>• An accompanying teacher/helper will have the responsibility as a back marker when walking along trails</li> <li>• A clear finish time and meeting place should be set before participants start the courses.</li> <li>• Students should be made aware of appropriate behaviour at the start of the day</li> <li>• The group leader must carry safety equipment including; first aid kit and mobile phone.</li> <li>• Supervision ratios will fulfil LEA guidelines – we recommend a minimum of 1:6 staff: students</li> <li>• Participants should be instructed to stay in pairs and not approach strangers.</li> <li>• Marshals should wear a bib to ensure they are easily recognisable.</li> </ul>



Holly	Sycamore	Scots Pine	Lime	Beech
				

Horse Chestnut	Ash	Whitebeam	Field Maple	Maple
				

Elm	Hornbeam	Oak	Alder	Silver Birch
				

Sweet Chestnut	Hawthorn	Hazel	Willow
			

## Silk Wood Orienteering Course: Short Course

1. Write the letter you find at each control point in the table below (make sure you put each letter with the correct control number).
2. Using the tree leaf chart overleaf, identify the leaf on each control and write the name in the space provided.
3. Rearrange the letters you have collected to make the name of a place.

Control Number	Control Letter	Name of tree	Control Number	Control Letter	Name of tree
1			11		
2			12		
3			13		
4			14		
5			15		
6			16		
7			17		
8			18		
9			19		
10					

Rearrange the letters to create a word connected with the arboretum: \_ E S \_ \_ N \_ \_ \_ T

## Silk Wood Orienteering Course: Medium Course

1. Write the letter you find at each control point in the table below (make sure you put each letter with the correct control number).
2. Using the tree leaf chart overleaf, identify the leaf on each control and write the name in the space provided.
3. Rearrange the letters you have collected to find a word connected to the arboretum.

Control Number	Control Letter	Name of tree	Control Number	Control Letter	Name of tree
1			11		
2			12		
3			13		
4			14		
5			15		
6			16		
7			17		
8			18		
9			19		
10					

Rearrange the letters to create a word connected with the arboretum: \_ \_ \_ \_ \_

## Silk Wood Orienteering Course: Long Course

1. Write the letter you find at each control point in the table below (make sure you put each letter with the correct control number).
2. Using the tree leaf chart overleaf, identify the leaf on each control and write the name in the space provided.
3. Rearrange the letters you have collected to find two words connected to the arboretum.

Control Number	Control Letter	Name of tree	Control Number	Control Letter	Name of tree
1			11		
2			12		
3			13		
4			14		
5			15		
6			16		
7			17		
8			18		
9			19		
10					

Rearrange the letters to create two words connected with the arboretum: \_ \_ \_ \_ \_