

# PRIMARY PHYSICAL EDUCATION













# Outdoor & Adventure Strand Orienteering

#### **Orienteering & The PE Curriculum**

Orienteering is part of the Outdoor and Adventure strand in the PE Curriculum. Orienteering is an exciting activity that combines the geographical skill of map work, the physical activity of walking or running and the adventure of exploring unfamiliar locations. It can be introduced through preliminary activities on the school site.

#### Primary PE Curriculum, pg.5



# **Curriculum Objective – Orienteering**

Strand Unit - Orienteering				
Junior & Senior Infants	1 <sup>st</sup> & 2 <sup>nd</sup> Class	3 <sup>rd</sup> & 4 <sup>th</sup> Class	5 <sup>th</sup> & 6 <sup>th</sup> Class	
<ul> <li>Identify areas of the hall, playing field or school site</li> </ul>	<ul> <li>Identify areas of the hall, playing-field or school site</li> <li>Find objects or areas by following a simple plan (set of drawings)</li> </ul>	<ul> <li>Identify symbols for familiar features on a map of a familiar area</li> <li>Undertake a star orienteering activity</li> </ul>	<ul> <li>Find controls on the school site, using a map or plan</li> <li>Undertake a memory star orienteering course</li> <li>Undertake point-to-point orienteering</li> <li>Undertake score orienteering</li> </ul>	



#### Warm ups

**Partner Ball Carry:** Pair participants and give each pair a foam ball. Pairs stand side by side and place the ball between them at the side of the hips. Invite pairs to walk towards different sides of the hall (front, back, left side, right side, compass points) using a coordinated approach to keep the ball in place- Encourage participants to speed up as they become more comfortable moving together, while also keeping the ball between them. Encourage pairs to use opposite sides of the body. Invite participants to consider different parts that can be used to hold and move the ball together. Some alternative ways to move the ball together are dribbling the ball, striking the ball and keeping the ball in the air while moving.

(Action for Life - Infants - Lesson 3) www.irishheart.ie/schools/primary-schools/action-for-life/junior/

**Here, There and Everywhere:** Set up a large playing area using cones. Outline different sides of the hall using positional language - front/back/left/right. Participants line up at the back of the playing area and respond to the following instructions. Here - walk/run to the front of the playing area. There - walk/run to the side that the teacher is pointing to. There - stay on the spot and complete 10 jumping jacks/ bounce on the spot/ march on the spot/ knee to elbow. Invite participants to move using different locomotor skills and different directions

- forwards/backwards.



(Action for Life - Middle - Lesson 3) www.irishheart.ie/publications/middle-action-for-life-digital-view/

**Team Alphabet:** Invite participants to spread out around the hall and name different ways to travel around the hall e.g. skipping, hopping, running etc. Choose one method of travel and participants move accordingly. Call a number and participants make a group of this number as quickly as possible. Call a word (with the same number of letters as the number called), participants use their bodies (standing, laying, sitting) to form the shape of the letters to make the word together. Invite participants to travel around the playing space, call a different number and word.

(Action for Life Senior Classes -O&A - Warm Up - Lesson 4 www.irishheart.ie/schools/primary-schools/action-for-life/senior/

**Steal the Treasure:** Set up a square playing area with one hoop in the centre and a hoop at each corner equidistant from the centre hoop. Divide the group into four teams, each team stands at a hoop (base). Call 'Go' one member from each team runs to the centre hoop and collects a bean bag, runs back and puts it in the hoop. Next participants run to the centre, collects a beanbag, returns to base with it. This continues until all beanbags are removed from the centre hoop. Participants can now run to other teams' hoops and steal one beanbag at a time without the team obstructing the 'stealer'. Stop the activity and count the number of beanbags.



### **Developing Orienteering Skills in the Primary School**

#### Orienteering Skill: Finding and recording evidence at a location

#### **Gone Travelling:**



Spread spot markers around the playing area, with a yellow 'Animal Card' face down under each one. Stick red 'Home Cards' to the various locations in the playing area. Invite participants to work in pairs and stand at a spot marker.

On instruction, participants turn over their 'Animal Card' under the coloured spot. In pairs, move around the room to find the 'Home Card' that matches their animal. When pairs have found the correct location of the matching 'Home Card', they discuss how the animal moves (does it swim, fly, crawl). Pairs travel back to their starting point, the spot marker, moving in the style of the animal on their card (i.e. if their home is a web, they crawl like a spider). Place the 'Animal card' face down underneath the spot marker. Move to a new spot marker and find a new 'Animal Card'.

#### https://irishheart.ie/schools/primary-schools/action-for-life/ Infants & 1st Class, Outdoor & Adventure - lesson 3

#### Introduction to control cards

Split the hall in two. Place five cones on each side. Under each cone, place a picture of an animal and a crayon making sure the crayon corresponds to the colour on the master card. Show the class an enlarged control card. Talk about the pictures. Walk to any cone. Demonstrate how to look underneath and find the animal. Now point to the same animal on the control card and show the empty box underneath. Demonstrate how to take the crayon from the cone, colour that box and replace the crayon under the cone. Repeat as often as you feel necessary. The children now work in pairs, half the class working in each side. Give each child a control card/answer sheet. Tell them to go to each cone in turn, colour the correct boxes on the control card and come back to you when finished.

(PSSI Lesson Plans, Junior and Senior Infants, Lesson 1) https://www.scoilnet.ie/fileadmin/user\_upload/Infantcontrolcardsanimals.pdf

#### **Orienteering Skill:** Understanding a key or legend and how it relates to reality

#### **Funny Faces:**

Set up the playing space with a hoop at one end of the required PE equipment to build a Funny Face at the other end. Put out extra if available to allow for mistakes.

Outline the concept of the word 'symbol' using one of the Funny Faces maps.

Divide the group in small groups, give a different Funny Face map to each group and move to a coloured hoop. One member of each group runs to their equipment pils and selects a piece of equipment and returns to the group with the piece of equipment, using the Funny Face map, place the equipment in the correct location. The next person runs to the pile of equipment, the activity continues until the Funny Face is complete with all pieces of equipment in the correct location. Swap maps, before playing a second time encourage each group to consider what skill they could focus on to improve how they perform in the activity. Skills that could be developed - teamwork, communication, leadership, problem solving, FMS running/walking.

Trio O Resource, www.britishorienteering.co.uk



#### **Orienteering Skill: Map Orientation**

#### Cone Grid:

Set up the course as shown in the 'set up' map. All cones are the same colour apart from the Start cone. Place punches at each control.

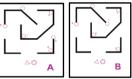
Introduce the activity, demonstrate how to orientate a map and use of thumbing to mark your position. Invite participants to take a course map, orientate it and find the starting point (the triangle). Visit each of the controls in numerical order as shown on the map. Limit the number in one cone grid at a time, so participants have adequate space to move around. Repeat using a different coloured course map, course maps increase in difficulty from white - yellow - orange- green.

Irish Orienteering Association Education Resources

#### 4x4 Maze

Set up the area according to the directions. When introducing the task, give a demonstration. Ensure that every time you turn, you re-orientate the map. Take a course map, start at the triangle shown, visit the 6 controls in numerical order and finish at the double circle. When visiting controls, mark the Control Card with the punch, then move on to the next one. Encourage safety when moving around. Check that the maps are orientated correctly and the thumb is used to show location. When running the course two or three pupils may be enough in the maze at one time, the larger the space between the poles the more runners can take part. Participants can go more than once, with different course maps each time. To confirm that participants are visiting controls correctly, pair them up, one partner runs while the other partner monitors. Give both partners the same course map, the monitoring partner stays at the start and can check the runners progress on their

course map, ensuring it is completed correctly. See a video of this activity here



Irish Orienteering Association, Education Resources www.orienteering.ie/wp-content/uploads/2021/02/Maze-Card-4.pdf

#### **Counting Cones:**

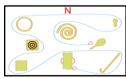
Invite participants to stand around the blue end of course and distribute copies of the demo map. Explain map orientation, start triangle and double circle for finish. Check maps are orientated correctly. Walk the route as shown on 'Demo Map', keeping the map orientated. Participants can follow your route on their copy of map with their finger as you walk. Next, give each participant a course map. Each student stands at their start, shown by the triangle on their map. They are to follow the route on their course map from Start to Finish. As they go, they add up the numbers on the cones as they pass. When finished, the participants should get their answers checked, then take a different map and try a different course. The answer is the sum of all the controls on their course, including the start and finish. See a video of this activity here



Irish Orienteering Association Education Resources www.orienteering.ie/wp-content/uploads/2020/03/Counting-Cones-Game.pdf

#### Map Orientation further activities:

Snake Walk activities - PSSI Lesson Plans - Outdoor & Adventure - 3rd & 4th Classes - Lesson 2 - <u>www.pssi.pdst.ie/pssi\_outdoor</u>





Questions and Videos to Support the development of Map Orientation Skills

#### Teach the thinking sequence:

- Where am I? (place a finger on the spot)
- · Where am I going? (orientate the plan)
- · How do I get there?

#### Orienteering Part 3 Finding your Way: www.youtube.com/watch?v=APXsmphepv4&list=PL0tmJ8S2L2ULCgYBg6yWSvyNgwjUNzbtU&index=6

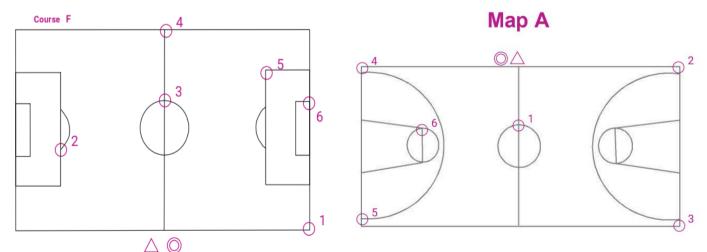
**PE at Home Outdoor & Adventure 5th & 6th Class Lesson 2** http://www.scoilnet.ie/pdst/peathome/

#### **\*** Orienteering Skill: Navigation - Following and Planning Routes

#### **Basketball court / soccer pitch orienteering:**

Place 10 controls on a basketball court/soccer pitch at different points along the court/pitch lines. Mark a start point on the map with a triangle to help the pupils to set/orientate their map correctly throughout the activity. Individually or in pairs invite pupils to navigate to each of the controls marked on their map. Pupils may be asked to visit the controls in numerical order (point to point) or in any order (scatter/score). Invite participants to record what they find along the route using a control card. Several different maps may be created with the same ten controls (e.g. each map may have five different controls out of the 10 put out). The use of multiple maps will challenge pupils to navigate for themselves and reduce the likelihood of them simply following others. Multiple maps will also allow pupils to start in different locations when working with large class groups and provide further challenge for early finishers. Alternatively, a staggered start may be used (e.g. 5 students start every 30 seconds) to disperse the students at the start. If multiple maps are in use it may be beneficial to create a master map.

The Irish Orienteering Association has created sets of sample multiple maps for a basketball court and for a soccer pitch. This activity could also be easily adapted for completion on a GAA pitch or Badminton court in a hall.





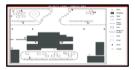


#### Irish Orienteering Association, Education Resources:

- <u>https://www.orienteering.ie/wp-content/uploads/2021/02/Courses-on-Basketball-courts.pdf</u>
- <u>https://www.orienteering.ie/wp-content/uploads/2021/02/Soccar-O-mini-courses-and-answers.pdf</u>

#### Map Walk:

A map walk is a useful activity to complete when using a previously unseen or relatively new map (e.g. map of the full school grounds). On the map, mark a start point and finish point, with a line to follow between the two points. The line should have a number of turns and should explore areas where students may independently orienteer in the future. Pupils line up behind the leader (e.g. the teacher) and follow the route on their own map while observing features pointed out by the leader. The leader may change regularly, with the person at the front going to the back. The teacher can observe and ensure all pupils have their maps orientated correctly as they follow the map walk. The teacher may walk alongside students who are having difficulty orientating their map and can help them set/orientate their map at each twist/turn. A map walk can help scaffold and support students to move from guided to independent orienteering. A map walk can also outline important safety features and rules to be adhered to when orienteering independently or in groups (e.g. boundaries and hazardous areas to avoid).



#### **Different types of Orienteering:**

As children develop their orienteering skills, they may progress to orienteering in various ways around the school grounds or local areas identified by the teacher. There are various types of orienteering which can be completed. Using a school map, select one of the following methods for orienteering.

Scatter orienteering	Map with all the controls marked (e.g. 1-10). Pupils must visit all the controls in any order. Pupils all start at the same time. Pupils return to base when complete and there is no time limit.
Score orienteering	Map with all the controls marked (e.g. 1-10). Pupils must visit as many controls as possible within the assigned time limit (e.g. 10 minutes). Individuals or pairs must return within the set time or receive a points penalty for late return. Pupils may start at the same time or there may be a staggered start.
Point to point orienteering	Map with all the controls marked (e.g. 1-10). Pupils must visit all the controls in numerical order e.g. starting at 1 and working upwards.
Star orienteering	Map with only 1 control marked. Bringing the map with you, visit the control marked and return to start. Receive a new map upon returning to the start and visit the control marked. Continue until all controls have been visited. Pupils may start at the same time or there may be a staggered start.



Memory star orienteering	Map with only 1 control marked. You can't bring a map with you each time and must memorise the position of control at the starting point before departing. Continue until all controls have been visited. Pupils may start at the same time or there may be a staggered start.
Team star orienteering	Map with all the controls marked (e.g. 1-10). Each pair of pupils receives one map. On the teacher's signals one person leaves the start point with the map in search of a control. The partner waits at the starting point. Upon returning to the base, they swap roles and the other partner searches for a different control. As a team they try to find all the controls.

#### **Teaching Orienteering Considerations:**

#### 1) Maximising map skill development

When orienteering using any of the above formats with the same map for everyone, consider designating **different start points** for each individual/pair (e.g. you look for number 4 first, you look for 3 first) to avoid 'following'. In addition, or alternatively a **staggered start** may be used (e.g. 5 students start every 30 seconds) to disperse the students at the start and help support all to map read rather than simply following other students.

When orienteering using any of the above formats, **multiple maps** may be used concurrently to maximise the amount of map reading being undertaken. Different courses can be set up, e.g. 2 separate courses with 10 controls each (total of 20 controls to put out). To reduce the workload involved in setting out two courses, the same controls may be used but they may be numbered differently on 2 different maps (total of 10 controls to put out). For example, the tree near the back door on map = control 1 and on map B = control 5.

#### 2) Using questioning to support student learning

Consider using some of the following sample questions when pupils are orienteering to help further develop their learning. The teacher may use these questions at the start of an activity or walk around and talk to students briefly during the activity.

- Point to where you are now on your map?
- Have you your map orientated/turned correctly? How do you know? Remember we move, the position of the map stays the same while we move then...
- Let's pause and look around us. What features do you see that are marked on your map? Where are we in relation to the feature (e.g. front door of school)
- If we turn and face the opposite direction how should our map be orientated now?
- Where are you going next? Do you need to turn/orientate your map?

#### 3) Using Autonomy and Choice to enhance orienteering motivation

The provision of autonomy and choice to students has been shown to enhance motivation. Autonomy and choice can be provided in an orienteering lesson in numerous ways. Pupils may, for example, be offered a choice of competitive orienteering where they are timed or alternatively just for fun orienteering where they are not timed. Students may have the choice of how to move around the orienteering course (e.g. walking, running, skipping, side stepping). The teacher may also provide choice by offering an easier or



harder orienteering course map to choose from. The harder map may have more controls, controls spaced further apart, controls that are harder to find and controls that are less visible e.g. plant tags. For a wide range of supports and resources to develop autonomy and choice in PE visit our scoilnet page <a href="https://www.scoilnet.ie/pdst/physlit/motivation/autonomy/">www.scoilnet.ie/pdst/physlit/motivation/autonomy/</a>

#### 4) Orienteering & FMS:

The orienteering lesson provides an ideal opportunity to develop in the fundamental movement skills of walking and running. It is advisable to focus on the development of one skill per strand unit. See *Move Well Move Often* resource for teaching points, activities, videos, sample lesson plans, assessment template for the FMS of walking and running teaching points.<u>www.scoilnet.ie/pdst/physlit/</u>. Walking activities suitable for the outdoor and adventure lesson can be found here <u>www.scoilnet.ie/index.php?id=1021</u> and running activities suitable for the outdoor and adventure lesson can be found on <u>www.scoilnet.ie/index.php?id=1021#fndtn-tab-15642</u>

#### **Cool Downs**

#### Waves of the Sea:

Invite participants to walk around the playing area, moving gently like waves in the sea without bumping into other participants.

Call the following instructions:

- Tall waves (Stretch high while walking)
- Small waves (crouch down low and walk in a low position)
- Gentle waves (walk upright swaying upper body from side to side)
- Calm sea (pause, inhale, exhale and smile)

(Action for Life - Infants - Lesson 4)

www.irishheart.ie/schools/primary-schools/action-for-life/junior/

**Cat Stretch:** Kneel on the floor with both hands on the floor, (knees below hips and hands below shoulder. Let out a deep breath, tuck chin towards chest and round the back, imagine that you are trying to move your belly button up to the sky.

Move slowly from cat to cow stretch and back for a few breaths, slowly moving into cat stretch on breathing out and into cow stretch on breathing in. Repeat this sequence 3-4 times.

**Cow Stretch:** Kneel with both hands on the floor as in the Cat Stretch. Taking a deep breath in, arch the back, tilt the chin and look up. Gently press the stomach down and the hips up.

Irish Heart Foundation Cool Down Stretches <u>www.irishheart.ie/publications/stretch-section/</u>

#### Sun Breathing Technique:

Sit in a comfortable position with hands placed on the lap. Gently inhale, raise the right hand towards the sun, exhale and lower the left hand towards the body. Inhale and raise the left hand towards the sun, exhale and lower the left hand towards the body.

Breathe <u>Resource</u> pg. 5



#### **Rainbow Breathing Technique:**

Invite participants to lie or sit in a comfortable position, spread arms out to the side and stretch arms gently over head with palms of hands facing up to the sky. Inhaling slowly, bring hands together. Gently lower arms and exhale. Make the shape of a rainbow as arms and hands are lowered. Bring one colour of the rainbow to mind as arms as raised and lowered.

Breathe Resource pg. 13



#### **Orienteering - Practical Tips:**

#### 1) Setting up the orienteering course:

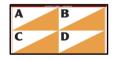
A whole school approach can be very beneficial in making the organisation of orienteering easier for all teachers within the school. For example, a senior class of pupils could set up the orienteering course on an agreed date and any classes in the school can participate. To promote time efficiency and pupil responsibility, pupils can help support the set up and tidy up of an orienteering course. Each pair may be given one control to place in the correct position according to the map. Pupils can be asked not to actively look for other controls when putting out their one control. Pupils can begin at a different start number to the number they set up. The class teacher may need to double check that all controls are placed in the correct position.

Two maps may be used simultaneously to increase challenge (e.g to. Ensure pupils haven't already seen the map that they will be using) or provide choice within your orienteering lesson. Divide class into pairs, give half the class map A and half the class Map B. Assign each pair numbers in each map to place controls. Upon return, pupils receive the alternative map to complete the orienteering activity.

#### 2) Use of Controls:

Choose from one of the following options of controls that will best suit the needs of the pupils. Print, laminate, punch a hole, hang using string

• Printable control cards, print, laminate, punch a hole in hang using string available on PSSI Outdoor & Adventure lesson plans /Tri-O Orienteering printable control cards



- Controls with punches available from <u>Decathlon</u>
- Numbered cards
  - Active School Flag Walkway markers





- Superhero cards
  - Pokemon cards
- Match Attax cards



- Plant tags (hard to see) can be used to offer of choice of easier/harder course.
- Different control types may be used over the number of weeks to progress the level of challenge, move from bigger more visible to smaller, harder to find controls
- 3) Collecting information on a control card options:
- Punch the control card using a punch at the control
- Record information using a pencil/coloured marker
- Laminated control cards with dry wipe markers
- Selfie with the control in the picture
- Record a discernible feature.

#### 4) Sourcing or creating a school orienteering map:

#### **Map options**

- Establish from other staff members if there is an existing map of the school grounds. If building work has been undertaken recently there may be a suitable map
- On occasion a fire escape map can be adapted for use as an orienteering map
- A map can be created using google earth. Search your school name/eircode and zoom in to the appropriate level. Take a screenshot or snip of the area around your school and this can be printed.
- A map can be drawn by a teacher or perhaps a senior pupil of the school grounds. This may link well with the geography curriculum
- The Irish Orienteering association offer a professional mapping service for schools for a fee
- With all maps, save/photocopy a blank base version of the map. Base maps can be laminated to be kept for the future. Controls can be drawn in on photocopies of the base map by hand, or alternatively electronically using a free software called purple pen.

#### Suggested Orienteering resources:

#### Websites

- <u>www.scoilnet.ie/pdst/primary/pe/strands/outdoor/</u>
- <u>www.pdst.ie/Outdoor-and-Adventure-activities</u>
- http://www.pssi.pdst.ie/pssi\_outdoor/outpage.html
- <u>www.orienteering.ie/orienteering-education-resources/</u>
- <u>https://irishheart.ie/schools/primary-schools/action-for-life/</u>
- https://www.scoilnet.ie/fileadmin/user\_upload/TriOOrienteeringResource.pdf
- www.orienteering.ie/orienteering-education-resource/teaching-orienteering-course/
- <u>www.orienteering.ie/diy-orienteering</u> -
- www.scoilnet.ie/pdst/physlit/

## Book

Schools Orienteering by Frances Stone. ISBN 978-2-7466-1331-7



PDST - PE Orienteering - www.scoilnet.ie/pdst/primary/pe/strands/outdoor -





# **Orienteering Activity Resources:**

Activity:	Resources:
1.Gone Travelling	Print and Laminate sets of Individual Animal Cards & Home Cards Spot Markers Action for Life Lesson Plans J.I 1st Class pg. 19 - 24
2.Introduction to control cards	Print and Laminate Animal Cards Print Control Cards and create master control card Print XXX ( to mark front of hall) Crayons Cones PSSI lessons – Outdoor & Adventure – Infants – Lesson 1 –pg. 4-6
3.Happy Faces	Print and Laminate Funny face maps 1 - 6 Bean Bags – 9 yellow, 4 green, 8 red, 7 blue Quoits – 2 yellow, 2 green, 8 red, 4 blue Cones – 6 yellow, 7 green, 7 red, 8 blue Hula hoops – 1 yellow, 1 green, 3 red, 1 blue 6 hoops
	Trio Orienteering resource is available <u>here</u> , see Funny faces on pg. 6-13
4. 4x4 Maze	Print and laminate 1 set of course maps 16 stakes/pigtail posts (alternative equipment: cones, mark area using chalk, agility poles, pool noodles stuck into cones, Barrier tape/ light rope to form the 'fences' 10 small cones 2 larger cones for Start & Finish 10 punches attached to the top of the cones Control Cards for participants
5. Counting Cones	Print and Laminate Counting Cones Set Up Map & Answers Counting Cones Course Maps 12 cones (3 red, 3 yellow, 3 green, 3 blue) Sticky labels for cones (number these as in 'Set Up Map')
6. Cone Grid	Print and Laminate Cone Grid course maps Print Cone Grid Control Cards Print Cone Grid Set up map & answers 16 cones (15 of one colour and one of a different colour) Pencil/Pens
7. Basketball/Soccer pitch Orienteering	Print and laminate Master map showing positions of 10 Control on the court/pitch Print Maps showing the position of the controls Pens/markers/punches



	10 cones Create a master copy of the control punch patterns (if you using punchers) from each of the controls
8. Map Walk	<b>Print and laminate one orienteering map (</b> map of school grounds/local area) per person with a pre-marked map walk line. The <u>Purple Pen</u> software can be used to mark in the line for the map walk before the maps are printed.
9. Different types of Orienteering	Print and laminate copies of the school map showing controls

#### Notes:

