

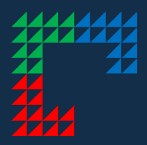
# Cross-Curricular Orienteering

“Making learning active across the curriculum!”

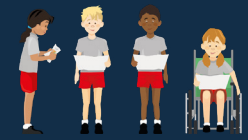


## Orienteering in PE Progression of Skills

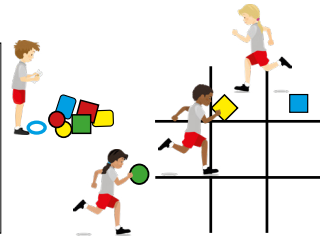
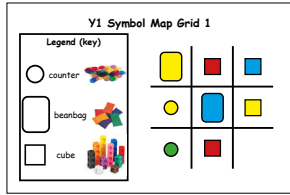
Year	Skills	Contexts
1	New skills: To understand that symbols in a legend represent real-world features; To know some orienteering symbols; To interpret a simple map & transfer understanding to real-world concrete materials; To make connections between satellite images, the orienteering map and the real-world.	<ul style="list-style-type: none"> <li>• Basic Maps and Map Grids</li> <li>• Scavenger Hunts</li> <li>• STAR Orienteering</li> </ul>
2	New skills: To know the 4 cardinal directions and use these to complete outdoor challenges; To know more orienteering symbols; To use known features on the orienteering map to navigate from the start to controls. + Application of skills learned in previous year groups	<ul style="list-style-type: none"> <li>• Basic Maps, Map Grids and Map Squares</li> <li>• Scavenger Hunts</li> <li>• STAR Orienteering</li> </ul>
3	New skill: Holding and setting/orientating the map + Application of skills learned in previous year groups	<ul style="list-style-type: none"> <li>• Basic Maps and Cones</li> <li>• STAR Orienteering</li> <li>• SCORE Orienteering</li> </ul>
4	New skill: Folding and thumbing the map + Application of skills learned in previous year groups	<ul style="list-style-type: none"> <li>• Basic Maps and Cones • STAR Orienteering</li> <li>• SCORE Orienteering • RELAY Orienteering</li> </ul>
5	New skill: Map memory and control flow + Application of skills learned in previous year groups	<ul style="list-style-type: none"> <li>• Basic Maps and Cones</li> <li>• STAR Orienteering</li> <li>• Point-to-Point Orienteering</li> </ul>
6	New skills: Using a compass to take a bearing; Team building skills focusing on: communication, cooperation, trust, empathy and patience. + Application of skills learned in previous year groups	<ul style="list-style-type: none"> <li>• Basic maps and cones • Point-to-Point Orienteering</li> <li>• STAR Orienteering • Control Only Maps</li> <li>• SCORE Orienteering</li> </ul>



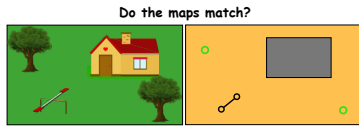
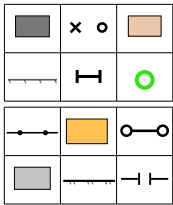
# Progression of Skills Overview - Diagram



## Year 1

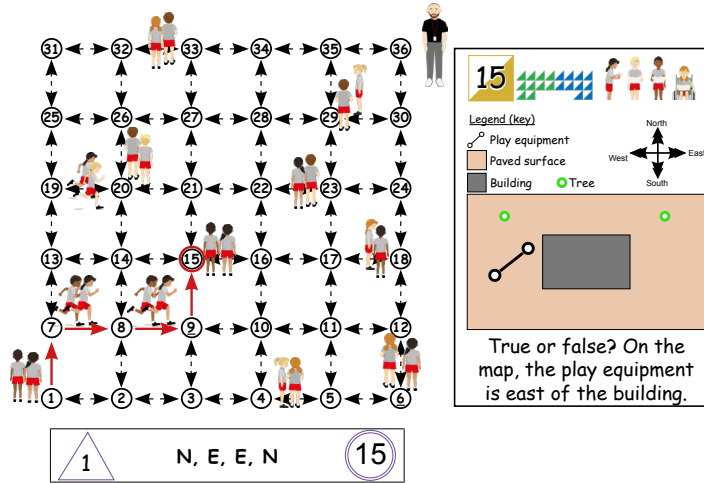


### Orienteering Symbol Games



Understanding symbols; Interpreting simple maps; transferring understanding to real-world concrete materials.

## Year 2



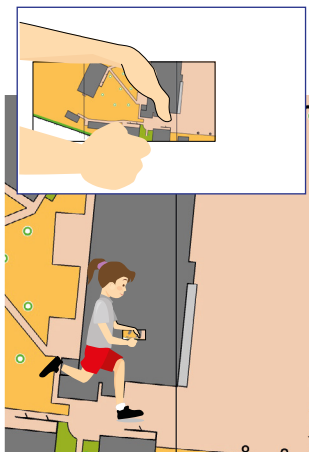
Using the 4 cardinal directions to complete outdoor challenges; Using known features on the orienteering map to navigate.

## Year 3



Holding and orientating the map.

## Year 4



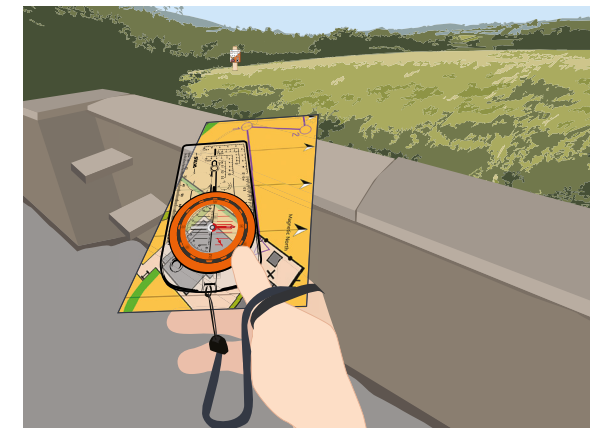
Folding and thumbing the map.

## Year 5

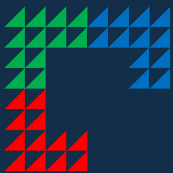


Map memory and control flow.

## Year 6



Using a compass to take a bearing; Team building skills focusing on: communication, cooperation, trust, empathy and patience.



# Cross-Curricular Orienteering




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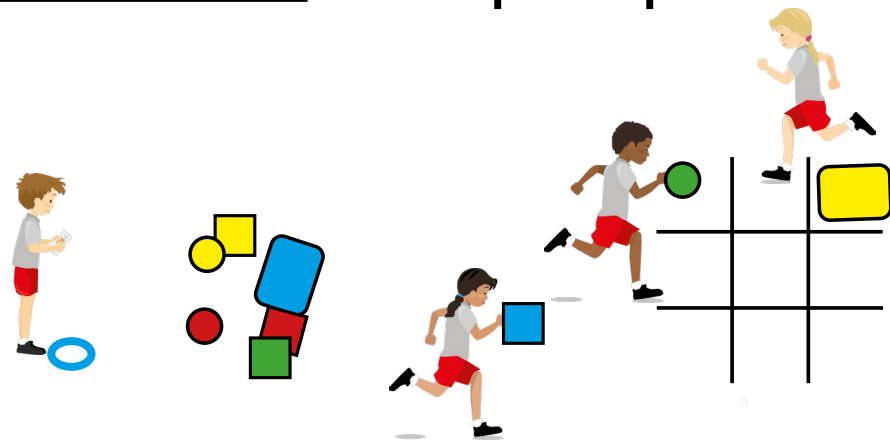
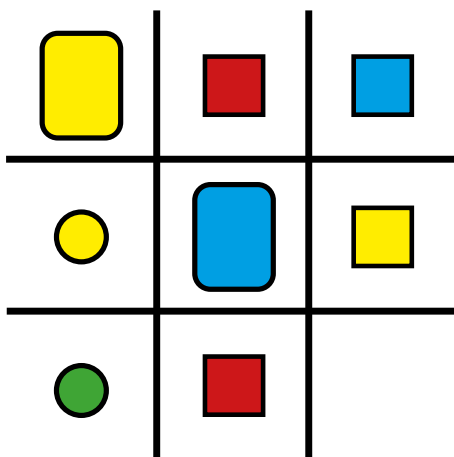


## Y1 - Symbols, Simple Maps and Making Connections




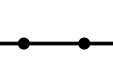






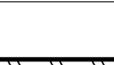

Y1 Symbol Map Grid 1

**Legend (key)**

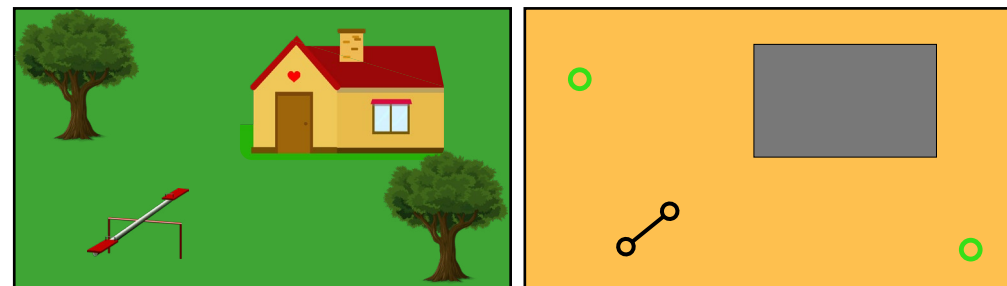
- counter 
- beanbag 
- cube 



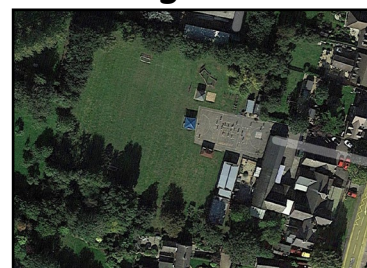
Orienteering Symbol Games

Do the maps match?



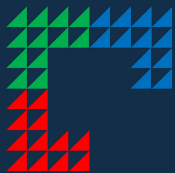
### Making Connections Google Earth and the Orienteering Map



**EXAMPLE KS1 PERMANENT COURSE MAP - CONTROLS 1-15 (WARM-UP & ACTIVITY 1)**  
© copyright by Cross-Curricular Orienteering (CCO) (http://www.cco.org.uk)

**Legend (key)**

- Body of water/pond
- Open land/grass
- Open land/gravel
- Park, light vegetation
- Thick vegetation
- Thick vegetation
- Hedge
- Single large tree/wood
- Paved/artificial surface
- Car park
- Paved footpath
- Lane/road path
- Lane/road
- High fence
- Gate, crossing point
- Building construction
- Control
- Permanent main water feature
- Bench, seat, table
- Obstacle play equipment

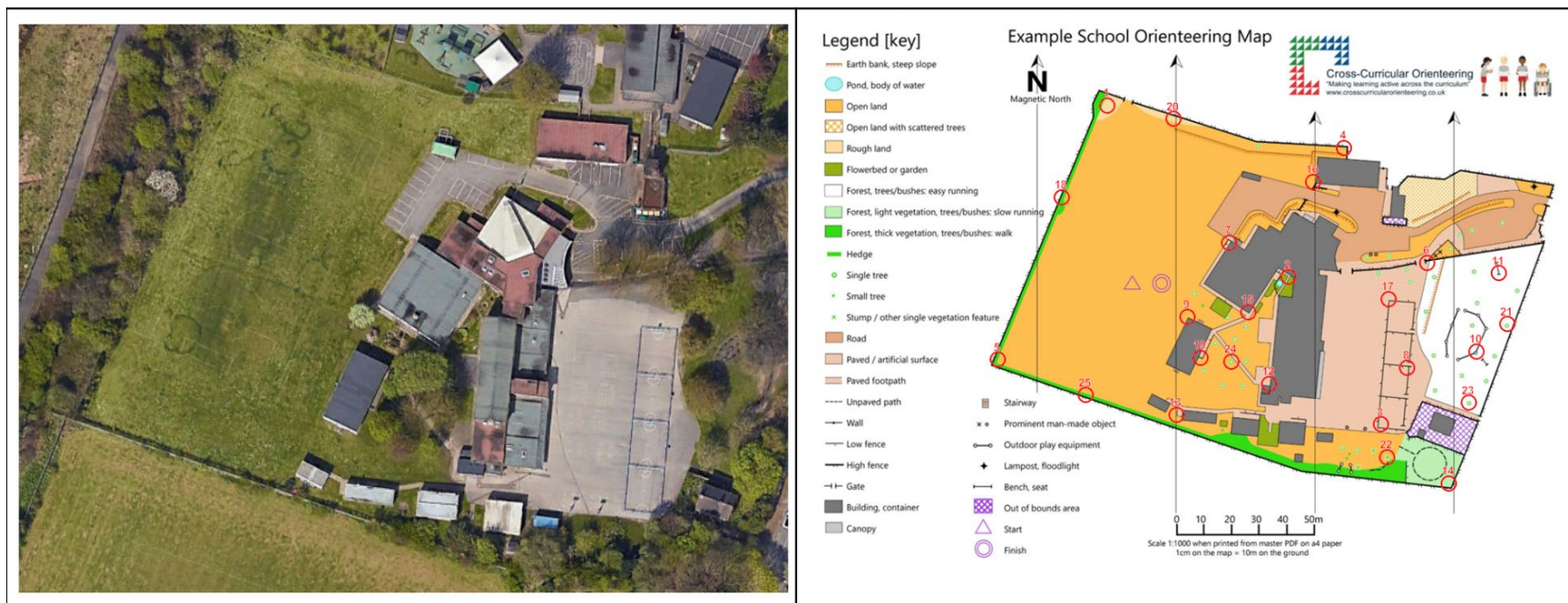


# Cross-Curricular Orienteering

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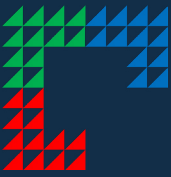
## Y1 - Making Connections: Google Earth and The Orienteering Map



### Example Teacher Input / Questions

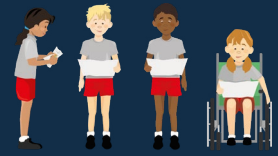
- Place your cursor on the Google Earth map - ask pupils to put their finger on their orienteering map to correspond. What feature is this? What feature is next to the cursor?
- Where is the school field on the satellite image? Ask pupils to point to the field on their orienteering map.
- Where is the start (purple triangle)?
- What colour represents the school building/playground/field on the orienteering map?

**Note, technical skills like orientating the map are taught from Y3. Making connections between the satellite image and orienteering map are sufficient for the ability of KS1 pupils, and this should be done in the classroom before going outside.**

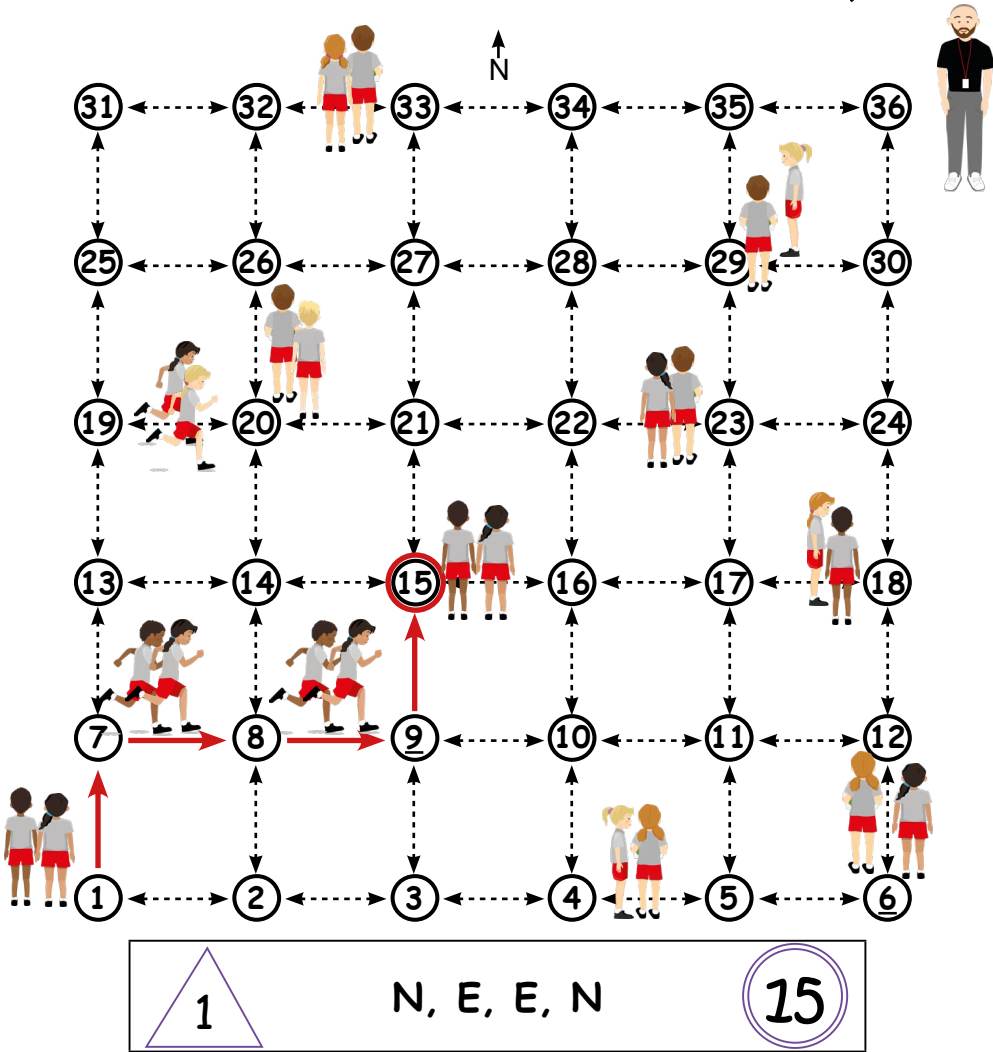


# Cross-Curricular Orienteering

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## Y2 - Cardinal Directions, More Symbols and Making Connections



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**Legend (key)**

<span style="color: green;">●</span> Tree	<span style="background-color: #d2b48c; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Paved surface
<span style="background-color: #ffcc99; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Open land	North West ← → East South
Bench	<span style="color: red;">x</span> Man-made object

True or false? On the map, the paved surface is north of the tree.

15

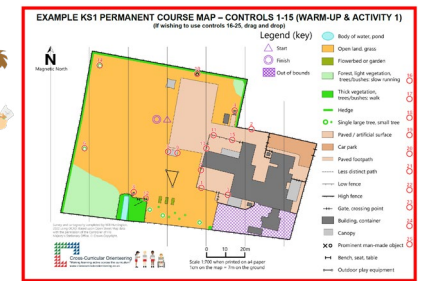
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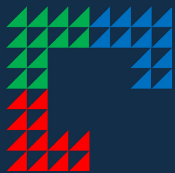
**Legend (key)**

Play equipment	<span style="background-color: #d2b48c; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Paved surface
<span style="background-color: #808080; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Building	<span style="color: green;">●</span> Tree

True or false? On the map, the play equipment is east of the building.

### Making Connections Google Earth and the Orienteering Map



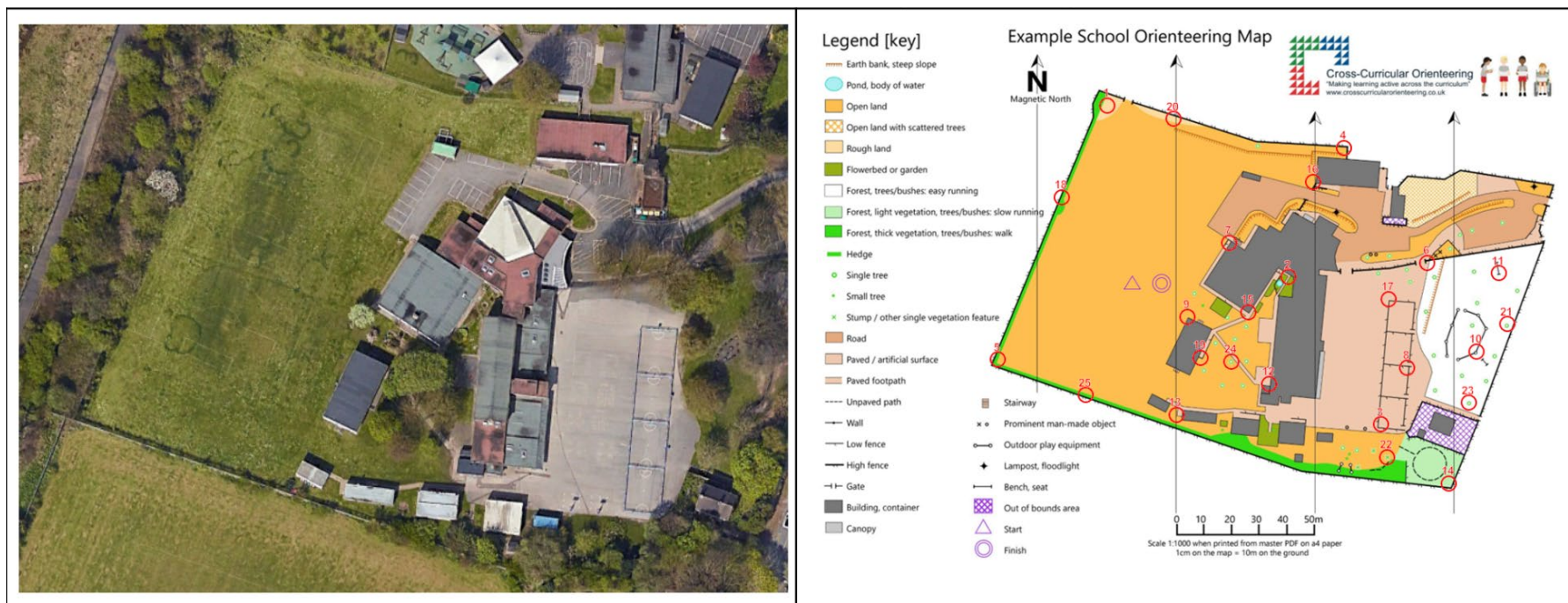


# Cross-Curricular Orienteering

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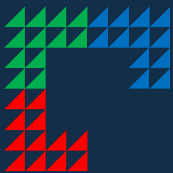
## Y2 - Making Connections: Google Earth and The Orienteering Map



### Example Teacher Input / Questions

- Place your cursor on the Google Earth map - ask pupils to put their finger on their orienteering map to correspond. What feature is this?
- What feature is next to the cursor?
- Where is the school field on the satellite image? Ask pupils to point to the field on their orienteering map.
- Where is the start (purple triangle)?
- What colour represents the school building/playground/field on the orienteering map?

**Note, technical skills like orientating the map are taught from Y3. Making connections between the satellite image and orienteering map are sufficient for the ability of KS1 pupils, and this should be done in the classroom before going outside.**



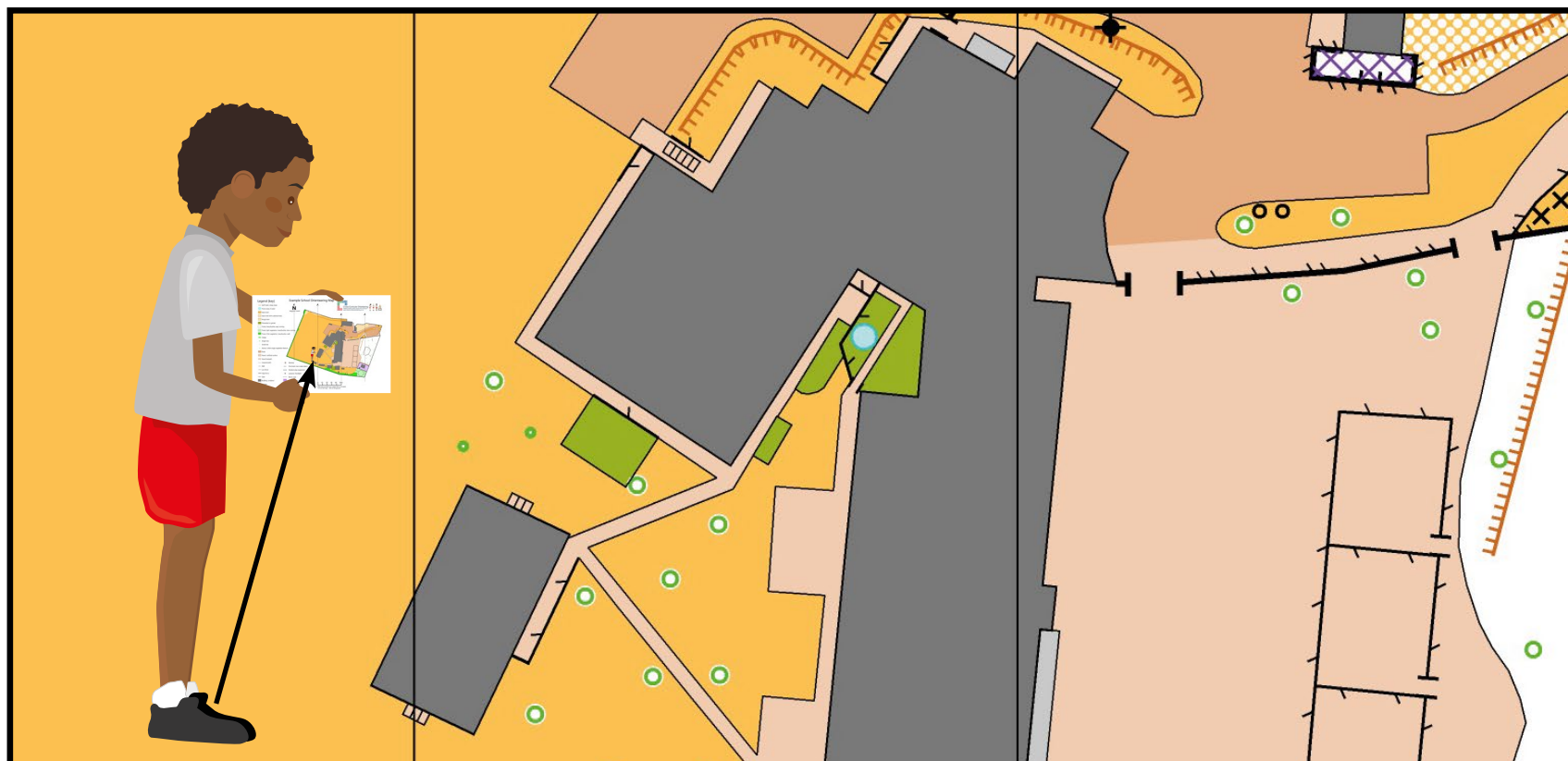
# Cross-Curricular Orienteering

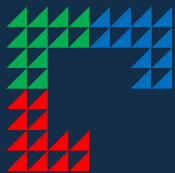
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## Y3 - Holding and Setting/Orientating the Map

- **Holding the map in both hands** helps with keeping control of the map and keeping the map set.
- **Setting the map** means orientating the map with the real-world. We can do this using known features or by using north. The boy has set his map correctly using known features - he is on the main school field with the buildings in front of him and the field to his left and right. His map is held to match this. His map is also orientated with north. Keeping the map set allows an orienteer to have their running direction straight ahead of them allowing them to keep track of where they are - as they turn, they will turn around their map to maintain this.





# Cross-Curricular Orienteering

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## Y4 - Folding and Thumbing the Map

**Setting the map** orientates the map with the real world so an orienteer can have their running direction straight ahead of them.

**Folding the map** helps an orienteer focus on the area to be travelled between controls and allows for thumbing.

**Thumbing the map** helps an orienteer keep track of their location. As they travel, their thumb moves on the map to correspond with their position.

### Step 1

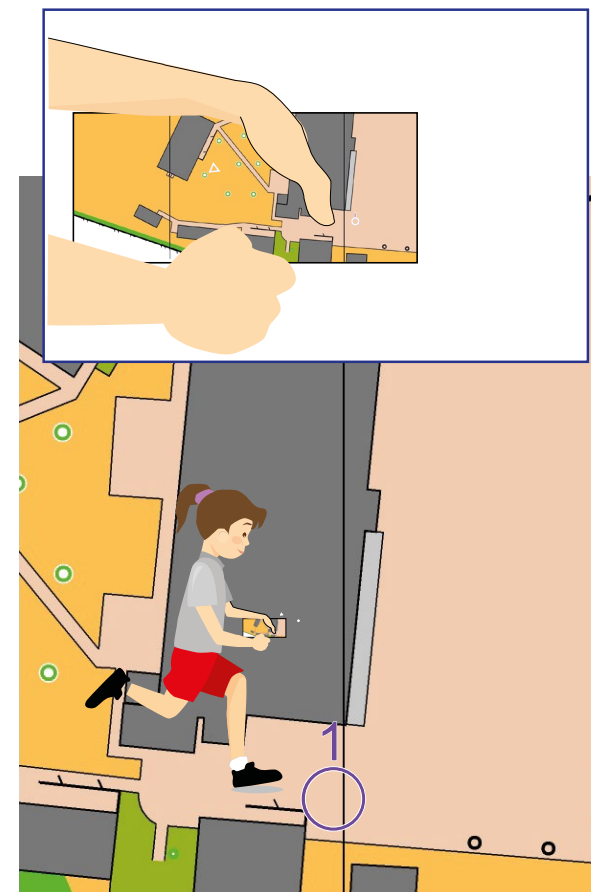
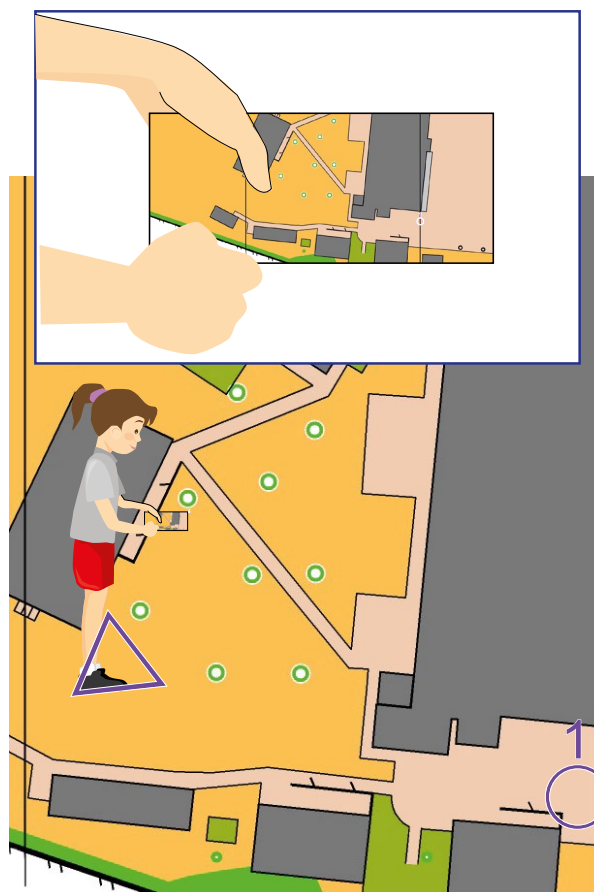
Set the map using known features or north so your running direction is straight ahead of you.

### Step 2

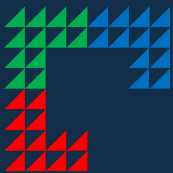
Fold the map to focus on the area to be travelled between controls and to allow for thumbing.

### Step 3

Travel, thumbing the map consistently to keep track of your position.







# Cross-Curricular Orienteering

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## Y5 - Map Memory and Control Flow

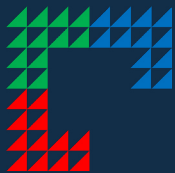


**Map memory** is memorising the important parts of the map to help navigate the controls, minimising the amount of times needed to refer to the map.

**Control flow** is flowing through the controls without having to stop at each one to re-read the map. It involves planning ahead and memorising the direction of the next control so athletes can exit their current control quickly.

Other previously learned skills should continue to be applied where possible:

- Holding the map in both hands
- Setting/orientating the map
- Folding and thumbing the map to maintain position.

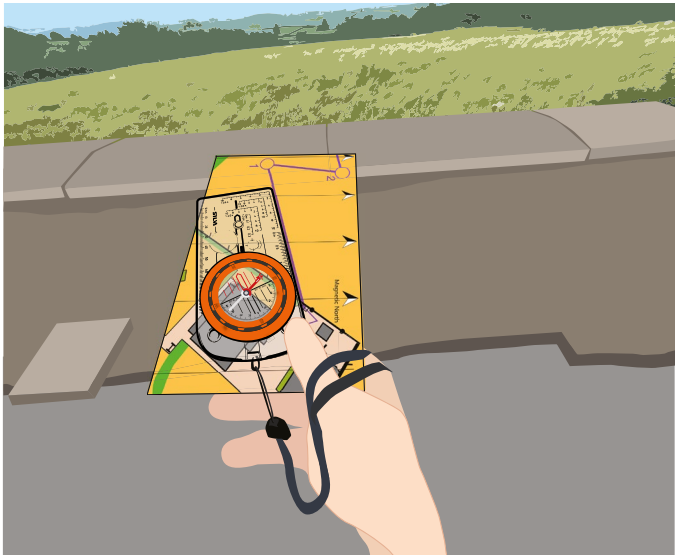
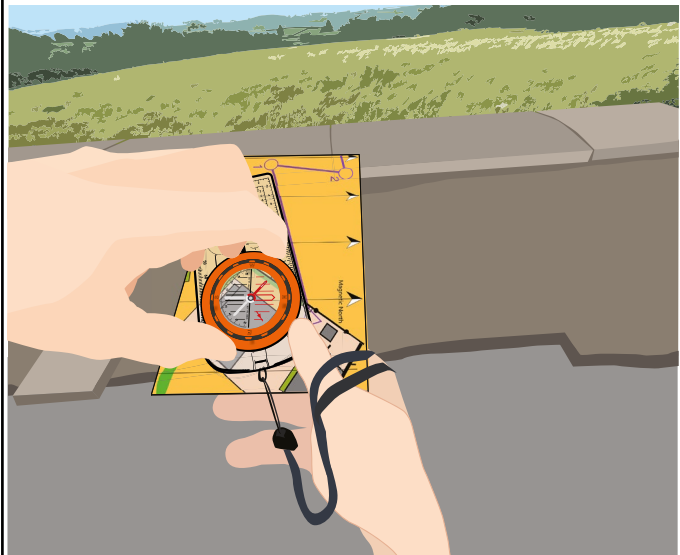
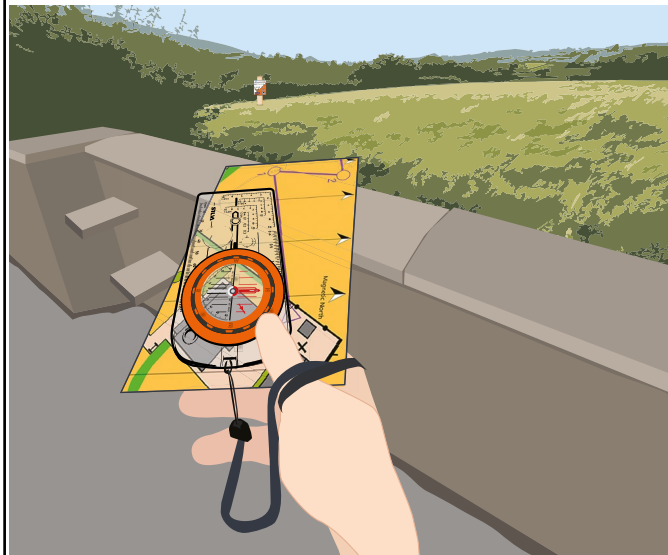


# Cross-Curricular Orienteering

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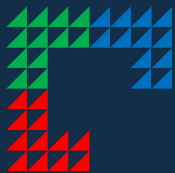


## Y6 - Using a Compass to take a Bearing

Step 1	Step 2	Step 3
<p>Place the compass on the map with the edge pointing forward along the line of travel.</p> 	<p>Rotate the bezel until the orientating lines / arrow on the compass are parallel with the north lines on the map.</p> 	<p>Turn yourself until the north end of the magnetic needle aligns with the orientating lines / arrow. The direction of travel arrow now points towards your destination.</p> 

### Other Important Points:

- Make sure the compass and map are flat.
- Make sure no metal is near the compass so it doesn't interfere with the magnetic needle.



# Cross-Curricular Orienteering

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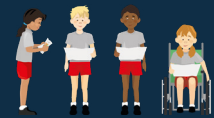


## Y6 - Team Building - Stipulation Orienteering

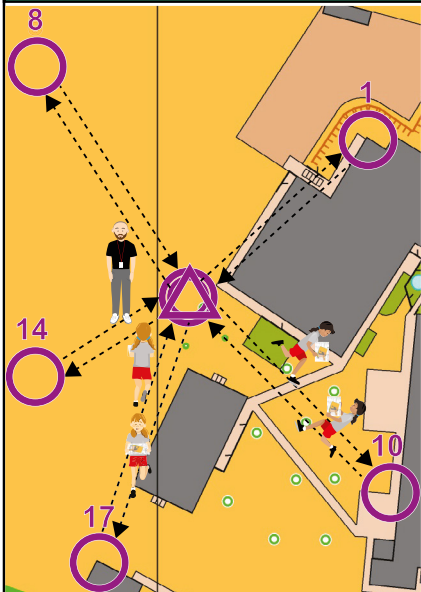




# Ways to Deliver Cross-Curricular Orienteering



## STAR Orienteering



Athletes navigate to a single control at a time returning to the start before navigating for another. Can also be run as a relay.

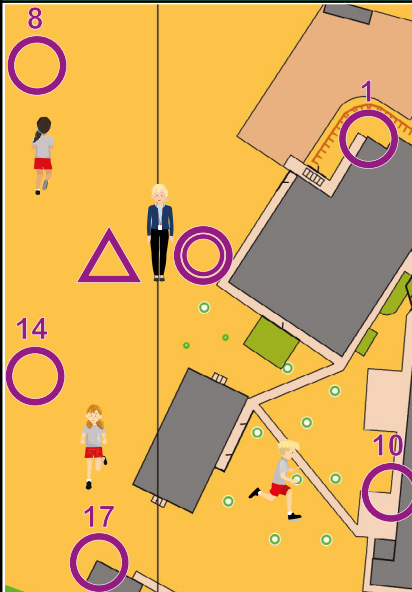
**Great for:**

- Introducing orienteering skills
- Providing regular feedback
- Keeping track of pupils
- Covering greater distance

**Drawbacks:**

- More time is required – it takes longer to complete a STAR course due to the greater distance covered

## SCORE Orienteering



Athletes find as many controls as possible in any order within a set time. Penalties can be imposed for late finishes.

**Great for:**

- Developing route choice and decision making
- Answering lots of questions

**Drawbacks:**

- Difficult to see how pupils are performing until the challenge is finished
- Can cover less distance so courses can be completed quickly – consider the space and task(s) to be used

## Other Alternatives

### Scavenger Hunt or Relay Run:

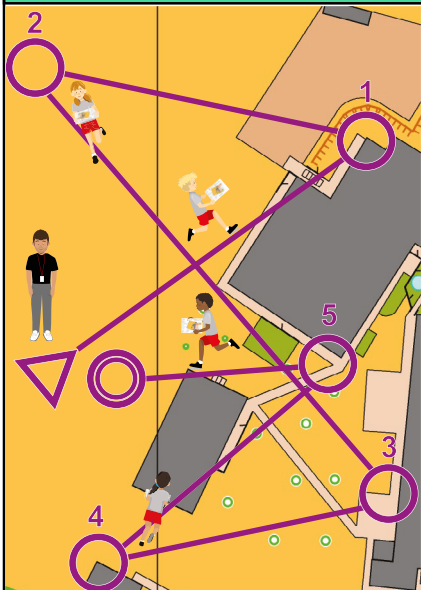
No maps required. If running as a scavenger hunt, questions are scattered throughout a designated area for pupils to answer as many as possible within a set time. If running as a relay, questions are placed at the end of the running area for pupils to run relay-style and answer.

### When to scavenger hunt or relay?

- Zero prep time e.g. no time to find / print maps
- Pupils haven't taken part in any orienteering in PE lessons and lack map-reading skills
- Poor weather

## Point-To-Point Orienteering

(also known as classic, loop and linear orienteering)



Athletes navigate a series of controls in the order shown by the route line on the map.

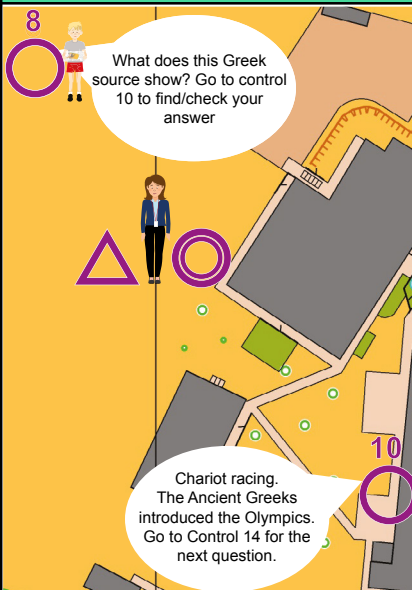
**Great for:**

- Developing more advanced orienteering skills e.g. using a compass, map memory, control flow, aiming off etc.

**Drawbacks:**

- More time editing the maps with route lines is needed - with a class of 30 pupils, multiple courses with different routes will need creating so traffic is dispersed across the course

## Questions lead to Answers Orienteering



Athletes navigate to a control with a question which directs them to another control with the answer.

**Great for:**

- Making fact-finding lessons active

**Drawbacks:**

- Difficult to see how pupils are performing until the challenge is finished

## Always consider STEP

Always consider the space, task, equipment and people (learners). For instance:

- Is the space being used appropriate for the learners?
- Are the tasks / questions appropriate for the space and duration of the lesson?