Introduction:

In this module you will learn all about using maps, through the theme of music festivals. By the end of the six lessons, you will be able to:

- Understand the meaning of the terms **site** and **situation**, and be able to use maps to describe the site and situation of the Glastonbury festival.

- Use **Google Earth** to locate some global music festivals and be able to describe their site and situation.

- Use the **Environment Agency Flood risk map tool** to find out about the risk of flooding at different UK festival sites.

- Examine the impacts of festivals and what can be done to reduce these impacts and make festivals more **sustainable**.

- Design your own festival, using all of the skills, knowledge and understanding you’ve gained throughout the unit.

*Tick off each of the skills once you have learnt them!*

What’s music got to do with it?

Music festivals are held each year all over the UK and the world. Like any event or attraction, their location isn’t accidental; they are located in certain places for certain reasons. We can therefore look at the **site** and **situation** of music festivals...

**Site** the features and characteristics of the actual place at which the festival is located.

**Situation** the location of the festival in relation to its wider surroundings - things like communications, other settlements, rivers, relief.
What is a map?
Maps are 2-D drawings of features we can see in 3-D in real life. Maps are very useful.

How many different uses can you think of for maps?

Ownership – maps are used to show ownership and control of areas of land

Planning and development – where new developments should go and what they will be like

Understanding spatial relationships – the police use maps to track crime patterns

General reference – finding out where places are

Communication – newspapers use maps to display information and to convey a particular message

Forecasting and warning – weather maps, Environment Agency flood maps

Understanding and using maps
The following table gives the main terms and definitions associated with maps, along with some guidance on how to use them. The interactive activities you’ll be using in this module will help you to become really confident at the different skills associated with map reading and interpretation.

<table>
<thead>
<tr>
<th>Key term</th>
<th>Definition and explanation</th>
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<tbody>
<tr>
<td>Map</td>
<td>Maps are 2-D drawings of features we see in 3-D in real life. The Ordnance Survey is Great Britain’s national mapping agency, providing the most up-to-date and accurate geographical maps of the country. Their maps have a scale, frame, grid lines and numbers, symbols and a key.</td>
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<tr>
<td>Scale</td>
<td>Scale is the ratio of the distance on a map to the distance in real life. There are 2 scales used on most OS maps: 1:50,000 where 1cm on the map = 50,000cm or 500m on the ground and 1:25,000 where 1cm on the map = 25,000cm or 250m on the ground.</td>
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<tr>
<td>Distance</td>
<td>The distance between two points on a map can be measured using a piece of string (easier as it’s flexible so can bend around the corners on the route!) or with the edge of a piece of paper. If you’re using the paper method, mark the start of the route on the edge of the piece of paper,</td>
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and add another mark every time you encounter a bend in the route, until you reach your destination. You will end up with a series of marks on the edge of a piece of paper which follow the route - the start and end points of which are the important ones for calculating the overall distance.

To convert the length of string or distance on the paper into their distance on the ground, you will need to use the scale line on the map. Place the string or piece of paper against the scale line and read off the distance in km.

For more approximate distances, a useful tip to remember is that the blue grid lines on the map are 1km apart and can be used to measure the distance in km.

Symbols
Maps use symbols to show different features on the map, as they would be very cluttered if everything was labelled in words! Symbols fall into 3 basic categories: line or linear symbols (e.g. roads, footpaths, contours), area symbols (e.g. woodland or marshes), or spot / point symbols (e.g. buildings, bridges, masts, places of interest). The map will have a key to explain the meaning of each symbol.

Relief
The ‘shape’ of the landscape. On maps, this is represented using the brown squiggly lines, or contour lines.

Contours
Contour lines join places on the map which are the same height above sea level. In this way, they show the shape of the land in 2-D rather than 3-D. Interpreting contour lines can be tricky, but here are some basic rules to remember:

- Contours are lines on a map joining points of equal height.
- Land height is measured in metres above sea level.
- The distance between contour lines is called the contour interval, and is usually 10m but may be 5m in some upland areas on 1:25,000 maps where the land is very steep.
- Not all contours have numbers on them, so knowing the contour interval helps us to find out the heights of the lines which don’t!
- Contour lines can tell us about gradients (how steep the land is) - the closer the lines are together, the steeper the land.
- Contours can help us to recognize simple landform features like hills and mountains and their shapes, valleys, plateaux and spurs.

Direction
Remember that the vertical (up-down) grid lines on a map always run from north to south. Once you know which direction north is, it’s fairly easy to work out the other cardinal directions of the compass. North, South, East and West are the main ones, with NE, SE, SW and NW in between them. Things get even more detailed if you describe the points between these, i.e. NNE, ENE, ESE, SSE, SSW, WSW, WNW, and NNW.

Grid lines
The blue lines on a map are called grid lines. They run north-south (vertical lines or ‘eastings’), and east-west (horizontal lines or ‘northings’). Each line is numbered. Grid lines are a useful tool, helping us to find places and pinpoint exact locations on a map.

Grid references
Grid references give the location of a place or feature on a map. There are two types: 4-figure grid references and 6-figure grid references. 4-figure grid references identify the grid square that a place or feature is in, whereas 6-figure grid references pinpoint its exact location. Like contours, learning how to use grid references can be complicated,
but some useful rules to remember are:

- You always read the number along the bottom of the map first (the vertical lines or ‘eastings’), then those on the side of the map (the horizontal lines or ‘northings’). Two ways to remember this are ‘walk before you climb’ or ‘along the corridor, up the stairs’.
- 4-figure grid references give the numbers of the lines which meet at the bottom left corner of the grid square.
- 6-figure grid references have 6 numbers. The first, second, fourth and fifth in the sequence are the numbers you already know, giving you the 4-figure reference of the bottom left corner of the grid square. The missing numbers (3rd and 6th) are used to pinpoint the exact location.
- To work out the 3rd and 6th numbers in the sequence, you must imagine that each square is further sub-divided into 10 smaller sections or tenths, between the main grid lines. You get the missing 3rd number by counting along these smaller sections between the main vertical lines. You do the same for the 6th number by counting up between the main horizontal lines of the square you’re interested in.
- Practice is by far the best way of learning and remembering how to use grid references. Have a go at the interactive online activity in lesson 2 of the module.

Green festivals

Music festivals involve large gatherings of people, often in a very intense space of time and in a relatively small area. This will have impacts on the local area and the environment. These impacts can be studied, along with the attempts made by festival organizers to make them more sustainable. If something is sustainable, it ‘meets the needs of the present, without compromising the ability of future generations to meet their own needs’.

Can you simplify this definition in your own words?

In terms of festivals, this means that organizers try to reduce or eliminate environmental impacts, ensuring that the festival continues without causing harm, as far as is reasonably possible.

Festivals and flooding

Heavy downpours caused flash floods and mud baths at the Glastonbury Festival in 2005 and 2007.

The Environment Agency produce online flood risk maps for the UK which you can view for any area you are interested in. The map shows the flood risk in that area, and can be used to forecast the likelihood that a particular festival will flood if there is heavy and / or persistent rainfall.
Research opportunities

- Use the Ordnance Survey’s Map reading made easy-peasy leaflet to learn more about the map skills you’ll need in the module: www.ordnancesurvey.co.uk/oswebsite/education/pdf/mapreadingmadeeasypeasy2.pdf
- The Ordnance Survey Mapzone also has lots of games and interactive activities to help you to become more confident using maps: http://mapzone.ordnancesurvey.co.uk/mapzone/
- Familiarise yourself with using Google Earth on the Google Earth website: http://earth.google.com/
- If you’re already confident with map skills, you could try looking at the GCSE Bitesize website for some revision: www.bbc.co.uk/schools/gcsebitesize/geography/geogskills/geogskillsmapsrev1.shtml
- Don’t forget to have a go at the interactive online activities in lesson 2 of the Mapping Festivals module: www.geographyteachingtoday.org.uk/ks3-resources/resource/mapping-festivals/glastonbury-tour/