



Answers to questions and activities at the

seven sites

Hendre Lake

Lake number facts

If the sprinter ran around the lake at 3 metres per second, this means that in one second they run 3 metres.

The path is 800 metres so it would take:

- 1 second to do 3 metres;
- 2 seconds to do 6 metres;
- 3 seconds to do 9 metres;
- 4 seconds to do 12 metres.

So, you need to keep counting up in threes until you reach 800!

Or realise there are approximately 33 lots of 3 in 100, 8 lots of 33 would give you the total time round the lake.

Or divide 800m by 3 metres per second to get the time.

Any method should give you roughly 270 seconds. There are 60 seconds in a minute so it would take about $270 \div 60 = 4.5$ minutes.

If you walked at 1 metre per second rather than 3 metres per second that is three times slower, so it would take you three times as long to walk round the lake. Rather than taking 4.5 minutes when running at 3 metres a second it would take you 13.5 minutes.

The distance to the lake is 30 metres. To calculate how long it takes to get to the lake you need to divide the distance (30m) by the speed of the person/animal moving.

Swimmer
 $30 \div 0.8 = 37.5$ seconds

Duck
 $30 \div 0.5 = 60$ seconds

Rower
 $30 \div 1.6 = 18.75$ seconds



Black Rock

Historical clues

Evidence

You can see the slipway and steps at any time regardless of the tide.

If looking at the river:

You can see the slipway to the edge of the river; this would have been used by smaller boats to enter the water. Look to the left of the slipway (in the mud) for blocks of stone laid out in strips parallel to the river, and an old wooden stake sticking out of the water. These are the remains of the original Portskewett Pier where people got off the train and boarded a boat between 1863 and 1886.

Face away from the river towards the house. If you look to the right of the private house, the garden

is the site of the old railway line. The railway went under the bridge you can see at the back of the garden. If you walk back to the car park and round the private buildings there is a footpath onto the top of the bridge.

On the other side of the river you can see white buildings. These are private homes and on the site of a hotel that was used by passengers to stay in before crossing the river.

Changing sounds

Natural sounds may include the sounds of the water and birds such as robins, song thrushes, blackbirds and herring gulls. Other sounds may include dogs barking, cars moving, people talking and feet crunching leaves or gravel.



Magor Marsh

What is pollarded wood used for?

500 years ago wood was used for nearly everything! Wood was readily available, while few other materials were as easy to find and shape. There was no plastic and metal was expensive.

Wood was used for:

- housing
- heating the house
- boxes and baskets to carry things
- tools and handles for tools
- plates and cups
- shelter for animals
- transporting goods on carts
- toys for children

We still use wood for some of these things, because it is still cheap and easily available. However, there are also lots of other materials to choose from. Many things are made from plastic because it is easier to shape and mould. However, plastic does not biodegrade and once you make something from plastic it will be here for hundreds of years. Wood is very environmentally friendly because once you have finished with a wooden item, or if it breaks, it will soon rot down and become food or a home for animals.

Metal is used when strength and durability are required.



Newport Wetlands

Danger warnings

The light flashes twice every 10 seconds. There are 6 lots of 10 seconds in a minute so the light flashes

12 times every minute. This means that in 10 minutes it flashes 120 times. It flashes this frequently to make sure that every ship that passes sees the beam.



Parc Tredelerch

Lake facts and figures

There are 1,448 kilometres of water channels and London is 240 kilometres away. If you went to London and back it would be 480km and if you did it again it would be 960km, etc.

Or $1448 \div 240 = 6$

There are 6 lots of 240 in 1,448. So, you could go to London and back 3 times.

The lake contains about 60,000 cubic metres of water. A swimming pool contains about 300 cubic metres of

water so to find out how many swimming pools fit into the lake you need to divide one by the other.

$60,000 \div 300 = 200$ swimming pools would fit into the lake.

Landfill or nature area?

When visiting observe how different people use the park. Some people might be cycling or walking through. Others may be feeding the ducks, playing games or chatting with friends.



Rogiet

Changing sounds

Listen for sounds such as trains, vehicles on the motorway and planes overhead. Natural sounds may include birds such as robins, song thrushes, crows and blackbirds. Other sounds may include dogs barking, people talking and feet crunching leaves or gravel.

Where were the old railway lines?

You will notice that the land is very flat all across Rogiet; this was essential for the railway tracks to be laid evenly along the ground. There are also clearings among the trees; this allowed space for the railway tracks. As you look across the countryside park, there would have been many railway lines running along in the same direction as the existing railway line. There would have been sidings and space for steam engines to shunt trucks full of coal, live cattle and sheep.



Tredegar House and Parklands

Properties of materials

	Wood	Metal	Clay
Can be made into long planks	✓		
Stores large amounts of carbon dioxide	✓		
Waterproof	✓	✓	✓
Produces large amounts of energy when burnt	✓		
Malleable (easy to shape)		✓	✓
Strong		✓	
Provides some insulation from the cold	✓		
Durable (lasts a long time)		✓	✓

