

Name:

Science at the Roman Baths

Renewable Resources

In Roman times there was no electricity. The bath-house would have been lit by oil lamps. The rooms had under-floor heating. However, today the Roman Baths Museum uses electricity to power lighting and heating. How could we obtain this energy from around the Roman Baths?



Name some of the renewable resources we could potentially make use of at the Roman Baths.



Energy from the sun

Using a data logger measure the light intensity in 3 different places around the Roman Baths. Which would be the best place to fit solar panels to provide energy?



Energy from water

Are there any points around the Roman Baths where the water flow could be fast enough for small-scale hydroelectric power generation? Identify some, then ask a teacher to help you measure the flow of water into the Great Bath (point 3 on the map).

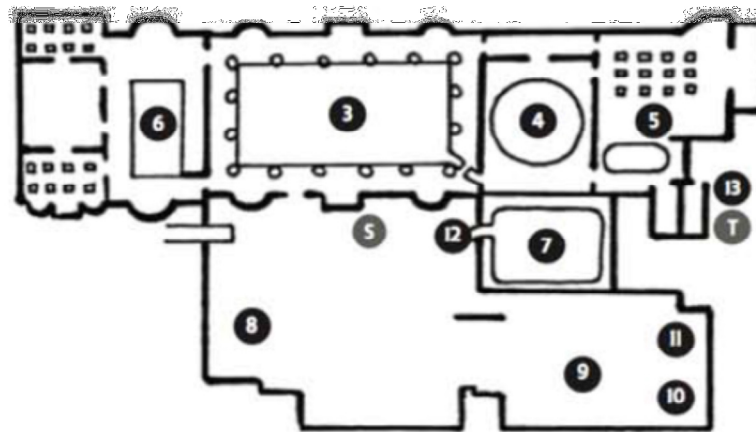
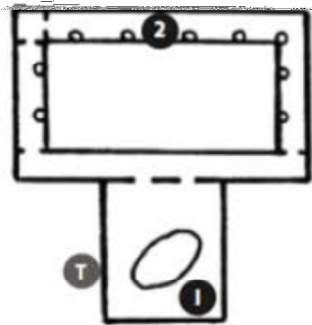


The water

The water in the Roman Baths is naturally heated below the Earth's surface. Where does this heat come from? The renewable resource that uses this heat is called geothermal energy. Find the temperatures of the various baths around the site using temperature probes. Which is hottest?

THE ROMAN BATHS

SCIENCE ACTIVITY - RENEWABLE RESOURCES



- 1 Entrance
- 2 Terrace
- 3 Great Bath
- 4 Cold Plunge Pool
- 5 West Baths

- 6 East Baths
- 7 Sacred Spring
- 8 Life and death in Aquae Sulis
- 9 Temple Courtyard
- 10 Temple

- 11 Objects from the spring
- 12 Spring Overflow
- 13 Shop & Exit
- T Toilets
- S Shop

Now you have identified resources of renewable energy, think about the Roman Baths, use the symbols below to represent where you would place each resource on the map.

around the Roman Baths, use the symbols below to represent where you would place each resource on the map.

SYMBOLS



Solar Panels



Hydroelectric Power



Geothermal Power

Are there any other resources you can think of that we could make use of?

