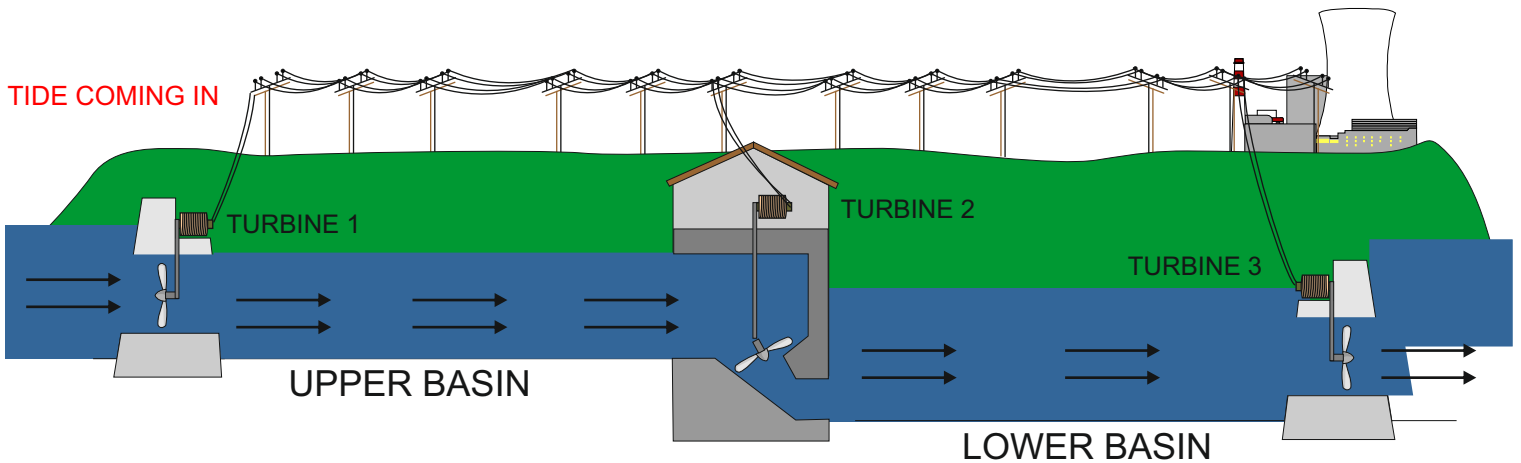


THE PROPOSED BRISTOL CHANNEL TIDAL POWER SCHEME

HELPFUL LINKS: <https://technologystudent.com/energy1/tidal2.htm>

1. In general terms, how can the action of the tide in an estuary, be used to generate electricity? **4 marks**

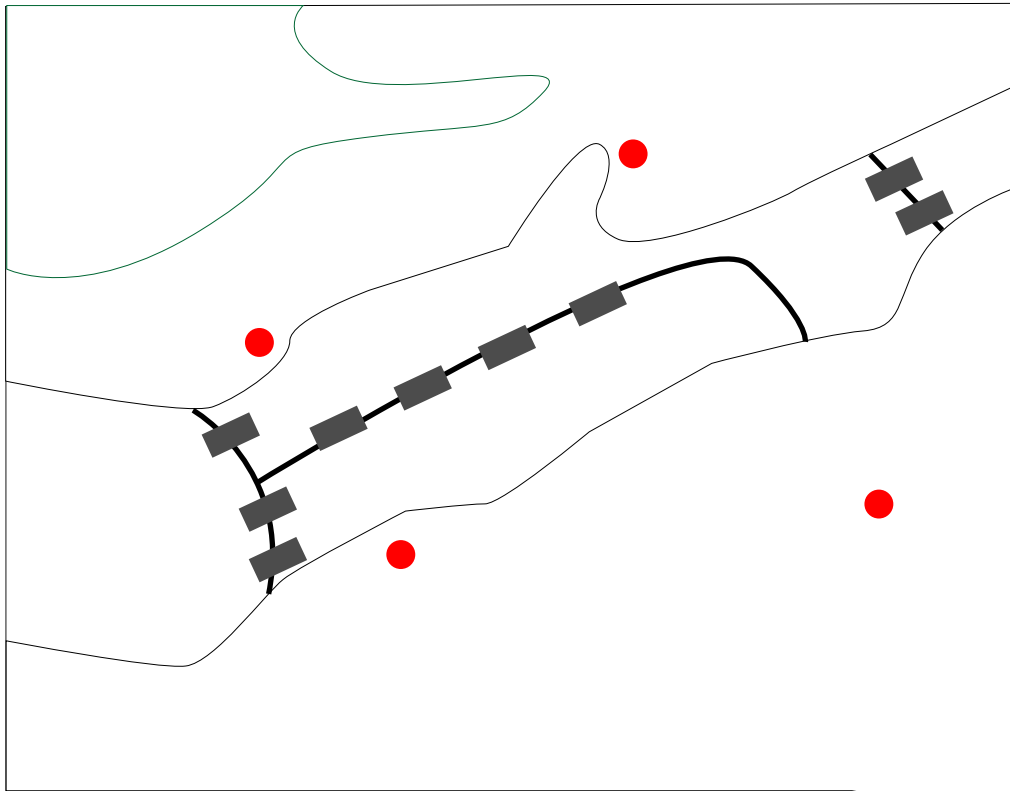
2. The diagram below represents the proposed Bristol Channel scheme, in the UK. With the aid of the diagram, describe the scheme for generating electricity. **5 marks**



THE PROPOSED BRISTOL CHANNEL TIDAL POWER SCHEME

HELPFUL LINKS: <https://technologystudent.com/energy1/tidal2.htm>

3. The outline map (below), shows the location of the proposed scheme. The list of names relate to the map. Write the names in their correct positions, on the map. Add arrows to show the movement of the tide. Add appropriate colour and shade to the map. **9 marks**



- NEWPORT
- CARDIFF
- WESTERN-SUPER-MARE
- BRISTOL
- TURBINES
- HIGH BASIN
- SLUICES

4. How do you think building a massive tidal power station will affect the environment? The key points below may help you answer the question. **5 marks**

- WILDLIFE HABITATS DESTROYED
- BUILD UP OF SILT
- LOSS OF FARM LAND NEAR THE SITE
- DAMAGE TO SEA LIFE
- NOISE AND POLLUTION DURING CONSTRUCTION

THE PROPOSED BRISTOL CHANNEL TIDAL POWER SCHEME

HELPFUL LINKS: <https://technologystudent.com/energy1/tidal2.htm>

4. What could be the benefits of building the Bristol Channel scheme ? **6 marks**

- RENEWABLE ENERGY
- COST EFFECTIVE OVER TIME
- TOURISM
- LOCAL ECONOMY
- JOB'S DURING CONSTRUCTION
- LONG TERM JOBS AFTER CONSTRUCTION
- DEVELOPMENT OF RENEWABLE ENERGY TECHNOLOGY

5. Do you think tidal power projects such as the Bristol Channel scheme are a good idea? Explain your answer. **4 marks**
