OCEAN OBSERVATORY SCOTLAND

NORTHERN SEA FAN AND SPONGE COMMUNITIES - ANSWERS

1. What two main organisms form Northern Sea Fan and Sponge communities?
   - ***They are formed by northern sea fans and cup corals.***
2. At what depths are Northern Sea Fan and Sponge communities usually found?
   - ***They are usually found at depths of 35–120 metres.***
3. What type of seabed do these communities grow on?
   - ***These communities grow on rocky seabeds, such as bedrock and boulders.***
4. Why is steady water movement important for northern sea fans and sponges?
   - **Steady water movement is important because it brings food and prevents sediment from settling on the animals, while not being too rough.**
5. Name two other marine species that live in or around these communities.
   - **Species living there include sea firs, soft corals (such as dead man's fingers), large sea squirts, sea cucumbers, and squat lobsters (any two correct).**
6. Why are Northern Sea Fan and Sponge communities important for other marine animals?
   - ***They provide shelter and habitats for many marine species, including sea firs, soft corals, large sea squirts, sea cucumbers, and squat lobsters.***
7. How do sea sponges feed, and how much water can they filter each day?
   - ***Sea sponges are filter feeders that feed by filtering water through their bodies, and they can filter up to 20,000 times their own volume of water each day.***
8. Where in Scotland are Northern Sea Fan and Sponge communities mainly found?
   - ***In Scotland, these communities are found along the west coast, the Outer Hebrides, and around St Kilda.***
9. Name one human activity that threatens these communities and explain how it causes damage.
   - **One threat is bottom-contact fishing gear or trawling, which can damage or dislodge species from rocky seabeds.**
10. Why does Scotland have a special responsibility to protect Northern Sea Fan and Sponge communities?
   - ***Scotland has a special responsibility because most of the UK's Northern Sea Fan and Sponge communities are found along Scotland's coastline, making them rare and unique habitats that need strong protection.***