

Check your understanding



1 Where does the energy for deep-sea chemoautotrophic bacteria come from?

Answer [From the planet – the thermal energy generated and stored in the Earth. It doesn't come from the sunlight.]

2 Why did we incubate the sub-seafloor microorganisms at high pressure?

Answer [These are their normal conditions: in the deep sea the pressure is high.]

3 This study focused on chemolithoautotrophs. What other types of autotrophs are there?

Answer [Photoautotrophs – all plants and some microbes use the sunlight for carbon fixation.]

4 Microbes near deep-sea hot springs showed high productivity. What does this mean for organic carbon - does it increase or decrease in these ecosystems?

Answer [High productivity means high levels of carbon fixation - a lot of inorganic carbon has been converted into organic carbon, providing the basis for the food web in these ecosystems]