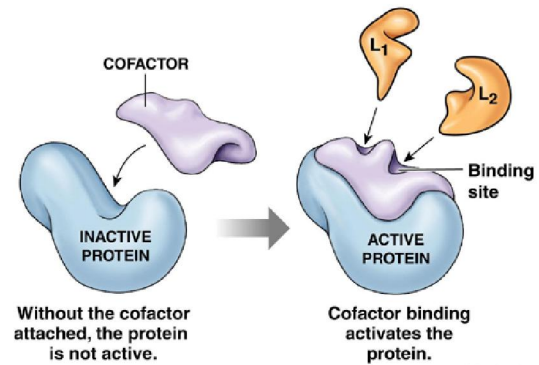


# QA9 - Metalloproteins

Read through the theory sheet TA13 – Metalloproteins, then use the information provided to answer the questions below.

## Metal Ion Cofactors

1. Suggest a reason why metals other than zinc are found in proteins, even they are less preferred.



## Hemoglobin and Hemocyanin

2. Give a reason why hemocyanin is used by some marine animals, despite binding less oxygen per molecule than hemoglobin does. In your answer consider the evolutionary history of these animals.

3. What is the purpose of the heme group in hemoglobin?



## Metalloprotein Processes

4. Cytochrome C is involved in electron transport chains. Name two common biological processes that heavily involve electron transfer.

