PRACTICE Complete the statements or answer the questions referring to large-scale fermentors. In answering the questions, avoid using the same expressions as those in the questions themselves.

A fermentor is equipped with an external cooling jacket for the purpose of allowing steam or coolant to circulate.

In some cases, internal coils are provided to ensure maintenance of proper temperature.

The mixture must be supplied with oxygen at all times, and therefore, most fermentors are fitted with two separate aeration systems.

What is the sparger intended to ensure? *It is designed to release air at high pressure.*

What is the aeration system designed to accomplish? *It is aimed at maintaining adequate supplies of oxygen.*

What is the purpose of baffles? *They are designed to break up clusters.*

What does the impeller ensure? *It facilitates the proper mixture of culture and air.*

What makes it possible to break up the clusters? *The baffles*

What would happen in the event of impeller failure or breakage? *The culture would not be properly aerated.*