

What are Enzymes Made Of?

Engagement Activity

This activity assumes some student knowledge of protein and protein structure.

Use Inspiration software to brainstorm what the students already know about enzymes. This accesses their prior knowledge and can be useful in guiding the post lab discussion (explanation phase of the lesson). A chalkboard or overhead projector can be used to list terms/ideas if Inspiration is not available.

The engagement activity begins with a teacher-generated question.

Question

What effect does cooking food have on the nutrients in the food?

Sample student responses

- The food changes color.
- The texture of the food changes.
- The nutrients in the food are changed.
- Harmful organisms that are in some foods are destroyed.

Lead-in to laboratory investigation

The lead-in to the laboratory investigation begins with another question posed by the teacher.

Question

How can you determine the effects that cooking has on a food?

This provides an opportunity to discuss scientific method and experimental design prior to the exploration phase of the lesson. It also allows the teacher an opportunity to distinguish between inferences and observations.

Closure

Closure is not achieved as this activity leads to the laboratory investigation. Closure is achieved during the post lab (explanation phase) session.