

membrane (and what that means)

For all three case studies

- Demonstrate initiating and planning skills and strategies with appropriateness (planning and organizing presentation of case studies)
- Demonstrate use of processing skills and strategies with relevance (to take scientific content and make it flow into relevant information for case studies)
- Demonstrate use of critical/creative thinking processes, skills and strategies with flexibility (to take knowledge of content and assess and evaluate real life situations)
- Demonstrate expression and organization of ideas and information with logic (across the presentation)
- Demonstrate use of conventions, vocab, terminology with fluency in presentation
- Demonstrate application of knowledge and skills in familiar contexts with flexibility (taking information from learning activities and applying to similar situations within case studies)
- Draw conclusions based on inquiry results and research findings, and justify their conclusions with reference to scientific knowledge

Knowledge & Understanding

- Identify some functional groups found in carbohydrates, proteins and fats

Case Study #2: Lactose Intolerance

- Explain how enzymes work to speed up reactions
- Explain the induced fit model of how enzymes work
- Describe how enzymes are regulated (activated and inhibited)

Case Study #3: Hydration and Dehydration

- Explain how osmosis works including the concept of concentration gradient
- Compare passive and active transport
- Describe the fluid-mosaic model of the cell membrane and how it results in a semi-permeable membrane (and what that means)

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- Demonstrate use of critical/creative thinking processes, skills and strategies with flexibility (to

When you are ready, submit your assessment for feedback and a grade by selecting the "Assignments" link and following the submission directions.

Case Study #1: J. Wellington Wimpy

- Explain using words and diagrams the structure of carbohydrates
- Demonstrate understanding of monomers and polymers in carbohydrates
- Explain using words and diagrams the structure of proteins
- Demonstrate understanding of monomers and polymers in protein
- Compare primary, secondary, tertiary and quaternary structures of protein
- Explain using words and diagrams the structure of fats
- Compare and identify condensation (dehydration) and hydrolysis reactions
- Describe the functions of carbohydrates, proteins and fats in cells and organisms
- Identify some functional groups found in carbohydrates, proteins and fats

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Case Study #3: Hydration and Dehydration