MOUTH
- _________ breaks down starches to disaccharides and some trisaccharide units.

SMALL INTESTINE (Hydrolysis vs Condensation)
- Pancreatic amylase produced in the pancreas ____________ down the remaining starches into the ____________ maltose.
- Sucrose (___________ sugar) and Lactose (___________ sugar) are ingested and not touched until the intestinal enzymes act.
  1. Maltase - breaks down ______________ into 2 glucose molecules via ___________ (add water to break bonds).
  2. Sucrase – breaks down ______________ into a glucose and ______________ molecule via hydrolysis.
  3. Lactase – breaks down ______________ into a glucose and ______________ molecule via hydrolysis.

ABSORPTION OF CARBOHYDRATES
  1. Carbs absorbed into ______________ cells of the ____________ and microvilli by facilitated diffusion.
  2. Moves from ______________ columnar cells into capillaries by ______________.
  3. Moves to the ______________ by the ______________ portal blood system.
  4. The liver ____________ impurities and stores the excess reducing sugars (monosachs) as ______________.

INDIGESTIBLE CARBOHYDRATES
A. Provides food for methane-producing, ______________ bacteria like E. coli.
  1. Meals high in carbs like ______________ (plant matter) and complex fiber provide ample ______________ for bacteria.
  2. Bacteria fermentation will produce H2O, CO2, and ______________ (methane gas).
  3. The bacteria ______________(above) make flatus (gas).

LACTOSE INTOLERANCE
- Often, the small intestine stops producing the enzyme ____________ in adolescents.
- This leaves excess ______________ (lactose) for the colonic bacteria.
- As bacteria ______________ more food, they produce more gas resulting in symptoms like ______________, ______________, and ______________.

WHY WE NEED CARBS?
- Carbs are essential for most cell ______________.
- Mitochondria take glucose and convert it to ______________ through ______________ (Glycolysis, Kreb’s, ETC).
- ATP is then utilized throughout the body for a ______________ of uses.
- Uses include ______________, cell building, ______________, digestion, blood pumping, ______________ ______________, etc.