• Enzymes
  biological catalysts that make reactions go faster
  specific for a single kind of reaction
  most enzymes are proteins

• Central Dogma of Molecular Biology
  information flow:  DNA → RNA → protein
  transcription (DNA → RNA)
  translation (RNA → protein)

• RNA Splicing
  exons: end up in the spliced RNA
  introns: spliced out of the RNA

• RNA Folding
  single-stranded nature of RNA allows for the possibility of intramolecular H-bonds
  intramolecular H-bonds allow RNAs to fold into specific three-dimensional structures

• Discovery of Ribozymes
  Tetrahymena (ciliated protozoan)
  self-splicing intron in ribosomal RNA precursor (1982)
  Tom Cech Nobel Prize in Chemistry (shared with Sidney Altman) (1989)

• Ribosomes – the most important ribozyme

More Info:

Listen to a short talk by Tom Cech (19 minutes) describing his discovery.
  http://www.hhmi.org/research/nobel/cech.html

See some pretty cool animations of the Central Dogma from the Walter And Eliza Hall Institute of Medical Research in Melbourne, Australia.

Questions you should be able to answer:

What is the central dogma?  What is transcription?  What is translation?  What is an exon? What is an intron? How does the single-stranded nature of RNA allow it to fold up into a specific structure? What is a ribozyme? Who won the Nobel Prize for the discovery of ribozymes?