- microtubule, microfilaments, intermediate filaments

**Kinesin**

- formed by two proteins, heads attach to microtubule to transport things
- two way vascular axonal transport facilitated by the micro tubular “highway” in a nerve cell

**Protein Synthesis**

* appendix C *

**What are proteins?**

- essential for cell function: muscle contraction - contractile proteins, Enzymes - for energy metabolism; synthesis, Transporters - to move molecules in and out, string of amino acids so we call them “Polymers” or chains of different amino acids
- every protein is different, and have a different sequence
- order is important
- must be identical for good working order
- no room for error

**The DNA Code:**

- DNA is a nucleic acid (not a protein)
- Bases:
  - A (adenine)
  - G (guanine)
  - C (cytosine)
  - T (thymine)
- create 3 letter “words” to code for the 20 amino acids used in proteins
- called “codons”
- G and C will always bind together and A to T will bind
- bases line up in pairs called “double helix”