Elaboration exercises

1) The central dogma of molecular biology is:

Explain how a protein can be formed from RNA and where this process takes place. If necessary, search under the term “Translation”.

2) After synthesis, some proteins undergo further processing steps. For example, phosphate groups can be attached to proteins. What is the function of a phosphorylated protein in the cell (video minute 7:00)?

3) Describe the ubiquitin-proteasome pathway. Watch the presentation by Aaron Ciechanover (approx. 3 min.).

http://www.mediatheque.lindau-nobel.org/topic-clusters/life-of-proteins#page=7
“...and Shows an Illustrative Description of Protein Degradation” (00:22:42 - 00:25:30)

4) Search the Protein Database (PDB) for a protein (e.g. myoglobin). Identify the representation model options (cartoon, spacefill, backbone...).

https://www.rcsb.org/pdb/home/home.do

