Sci 9 **Chapter 2: DNA, Mitosis and Asexual Reproduction Review**

1. Give 3 reasons why cells need to divide.
2. What are the building blocks that make up DNA?
3. Draw and label a nucleotide.
4. Name the 4 nitrogenous bases and which pair together?
5. Name the bonds that hold the nitrogenous base pairs together.
6. What is the scientific name of the twisted ladder shape of DNA?
7. What parts make up the rungs?
8. What parts make up the sides of the ladder?
9. Name three difference between RNA and DNA.
10. Describe the process of DNA replication.
11. What TWO processes are necessary for protein synthesis to occur?
12. Describe the process of DNA transcription.
13. Describe the process of translation.
14. What is a codon?
15. Give the complementary (other side) DNA strand to AGTCCG
16. Give the RNA complement of the above strand
17. What do ribosomes do?
18. Name in order and briefly describe each stage of Mitosis. Draw a quick diagram of each.
19. Name and briefly describe 5 forms of asexual reproduction. Give an example of an organism that uses each method.
20. Name 3 forms of vegetative propagation plants do naturally, and 3 forms we do artificially.
21. What is a mutation?
22. Name two ways mutations can occur.
23. Name three classifications of mutations and give an example of each.
24. What is cancer?
25. Define what a is carcinogen and give some examples.
26. What is a clone?