**The image below shows many details about how DNA makes copies of itself. Look closely at all parts of the image. Discuss and jot down your ideas below**

Bio 12 **DNA Replication- In Depth** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ch. 25 Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

p506-509 **1. Visual Thinking Strategy** *🡪 warm up your brain!* Block: \_\_\_\_\_

Looking at this image…



|  |  |  |
| --- | --- | --- |
| **What I already know is that:** | **What I can infer is that:** | **I am still wondering is:** |
| - |  |  |

**2. Why do Okazaki fragments occur? Label them on the diagram above (from Q 1)**

**3. Why are proteins a key part of DNA replication? Describe 3 specific reasons.**

**4. Use the diagram below to answer the questions**



**a) Why is an RNA primer required?**

**b) What would happened if primase was missing?**

**c) Do RNA primers exist in the new daughter strand of DNA?**

**5.a) What are telomeres?**

**b) Why are telomeres needed?**

**c) What evidence suggests telomeres may be a limiting factor in the life span of some tissues and even whole organisms?**