

1. Read pages 40 – 44 (pdf link on website or textbook)
2. Define cell cycle. *A continuous sequence of cell growth and division, including the stages of interphase, mitosis and cytokinesis.*
3. Give two examples of places in your body where you would find cells that live for a short time. Explain why.
Two examples; stomach, intestine, skin, liver – high exposure to physical damage as well as toxins or chemicals, leads to a higher need to regenerate and replace.
4. What are the two parts of the cell cycle? Describe what happens during each.
 1. *Interphase – preparing for cell division – cell growth and DNA replication.*
 2. *Cell Division – parent cell becoming two daughter cells.*
5. Define cell cycle checkpoints. *Cell cycle checkpoints are points in the process where proteins decide if the cell is fit to divide.*
6. What are the three reasons why cell division would not occur?
 - *Not enough nutrients, DNA has not replicated, DNA is damaged.*
7. Describe two methods by which cells leave the cell cycle. *Cells leave the cycle by 1. Cell death or cell suicide due to the cell being irreparably damaged or damaged DNA.*
8. Define tumour. *A Tumour is an abnormal clump or group of cells.*
9. How does a tumour form? *A tumour forms when cells ignore the “stop” signal and keep dividing.*
10. Define cancer. *Cells with abnormal genetic material, that can divide rapidly, and can spread to other parts of the body.*
11. How does a cancer tumour affect the body? *Tumours take up functional cell space and can consume nutrients destined for other cells.*
12. What do some mutation in cancer cells allow them to do? *Some cancer cells can continue to divide even when not attached to a surface, also, they can redirect blood flow to the newly divided cells.*
13. Define carcinogen. *Carcinogens are mutagens that affect cells and cause cancer.*
14. List three different carcinogens. – *asbestos, cigarette smoke, viruses*