Cell Division

1. Cell size is limited by:
2. Cell membrane size –
3. Small cells have
4. Large cells have
5. Nuclear control –
6. Reasons for cell division
7. Growth
8. Differentiation –
9. Repair
10. Regeneration –
11.
12. Reproduction
13. Asexual reproduction –
*
1. Sexual reproduction –
2. The Cell Cycle
3. Interphase – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_ of total time
4. G1 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. S – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. G2 – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Chromosomes
8. Chromatin –
9. Sister chromatids –
10. Centromere –
11. Cell Division
12. Mitosis –
13. Cytokinesis –
14. Stages of Mitosis
15. Prophase
16.
17. Metaphase
18.
19. Anaphase
20.
21. Telophase
22. Cytokinesis
23. Animal cells
24. Cleavage furrow –
25.
26. Plant cells
27.

Asexual reproduction –

Sexual reproduction –

Meiosis –

 Gametes –

 Diploid –

 Haploid –

 All gametes are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Why can’t gametes divide using Mitosis?

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*

 

All human cells, except for sex cells, contain \_\_\_\_\_\_ chromosomes arranged in \_\_\_\_\_\_\_ pairs

 Homologous pairs –

 Sex chromosomes –

 XX –

 XY –

Spermatogenesis –

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Oogenesis –

*

|  |
| --- |
| Comparing Mitosis and Meiosis |
|  | Mitosis | Meiosis |
| 2 divisions |  |  |
| 1 division |  |  |
| 4 daughter cells produced |  |  |
| 2 daughter cells produced |  |  |
| Asexual reproduction |  |  |
| Sexual reproduction |  |  |
| Duplicates chromosomes |  |  |
| Chromosome # stays same |  |  |
| Chromosome # is halved |  |  |
| Daughter cells identical to parent |  |  |
| Daughter cells different from parent |  |  |

Regulating the Cell Cycle

1. Not all cells move through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Nerve cells –

Skin cells –

Cells of digestive tract –

Most muscle cells –

1. Healing process –

Cyclins –

Internal regulators –

External regulators –

1. What happens if cell growth isn’t regulated?
2. What causes cells to lose control over growth?
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*
*
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