S2 Genetics

MARK: /10

Parent Signature: ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Homework 4 – Cloning and Stem Cells

Answer the questions on lined paper or the back of this sheet. Graph paper will be provided for question 7 by your teacher.

1. What is special about a clone? (1)
2. What was the first mammal cloned? (1)
3. In what country does this occur? (1)
4. What 2 things can all stem cells do? (2)
5. What are the 2 different kinds of stem cells? (2)
6. Name a disease you have learnt about in class that can be treated with stem cells? (1)
7. Scientists carried out research to see the effect of 4 substances on stem cell production. The results produced are in the table below:

|  |  |
| --- | --- |
| Substance | Number of cells produced (x103) |
| A | 250 |
| B | 100 |
| C | 50 |
| D | 125 |

Show these results as a bar graph. You will be awarded marks for the following:

Labelling the X AND Y axis (1)

Putting a scale on the Y axis (1)

Drawing all 4 bars correctly (1)