**Review Worksheet: DNA, Alleles and Genes**

**Name: ……………………………………………………………..**

*Do these questions, using your learning resources. Look at the “marks” to give you an idea of the level of detail required in the response (formative only – does not count towards your grade). At the end, mark your work, correct it, and fill in the reflection section. Questions marked \* require you to use reasoning, inferring and application of knowledge, or perhaps extra research to get the answer. It won’t be right there in the text.*

1: Where in a human tissue cell can DNA be found?

(1 mark)

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2: How many chromosome pairs do most humans have?

(1 mark)

*………………………………………………………………………………………………………………..*

3: What are the four bases involved in the genetic code? How do they pair up?

(3 marks)

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4: RNA does not contain Adenine. What does it use instead?

(1 mark)

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5: What are genes?

(5 marks)

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6: What does the mRNA do?

(4 marks)

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7: What does the tRNA do?

(2 marks)

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8: What functions can the proteins produced from genes perform in the body?

(3 marks)

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9: What is an allele?

(1 mark)

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10: How many alleles does a human being inherit for each gene, and who are they inherited from?

(2 marks)

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11: Can a person have two of the same allele for a given gene? Explain your answer.\*

(2 marks)

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12: Approximately how many genes are in the human genome?

(1 mark)

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13: Is each trait coded for by a single gene? Explain your answer.

(3 marks)

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14: What is a karyotype?

(1 mark)

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15: List and describe 5 modes of disease transmission.

(10 marks)

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Go back and mark your work using the marking key provided. What score did you get? /40

*I included enough detail in my answers.*



*I was able to find information in the text/powerpoint presentation.*

*I was able to reason and infer where the information wasn’t directly in the text (questions with \*).*

*I marked my work and wrote down any answers where I missed marks.*