**Review Worksheet: Meiosis and Sources of Genetic Variation**

**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: List the five genetic sources of variation.

(5 marks)

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2: Explain what occurs during Meiosis I

(3 marks)

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3: Explain what occurs during Meiosis II

(3 marks)

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4: What is “crossing over” and how does it contribute to genetic variation?

(2 marks)

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5: Discuss what is meant by random assortment of chromosomes during meiosis and how this contributes to genetic variation.

(2 marks)

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6: What is non-disjunction during meiosis and what are some results of this form of variation?

(5 marks)

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7: What is “random fertilisation” and how does it contribute to variation?

(3 marks)

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8: Draw an annotated homeostatic feedback loop (steady state control diagram) for regulation of blood gas concentration when CO2 levels fall.

(15 marks)

Go back and mark your work using the marking key provided. What score did you get? /38

*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.*