**Review Worksheet: Primate Evolutionary Trends**

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: What animals are included in the Primate Order?

(3 marks – 0.5 each for six examples)

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

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

2: To which family to Humans and Great Apes belong?

(1 mark)

*……………………………………………………….*

3: Which other living primate shares the subfamily *Homininae* with humans?

(1 mark)

*………………………………………………………*

4: What are the main features of primate digits?

(4 marks)

*……………………………………………………….*

*……………………………………………………….*

*……………………………………………………….*

*……………………………………………………….*

5: Most primates have an opposable big toe. Humans are the exception. What is different about humans that would make having an opposable big toe a disadvantage?

(2 marks)

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

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

6: How many teeth do Humans, Apes and Old World Monkeys have? What is their dental formula?

(2 marks)

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

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

7: What is the most likely reason for the reduction in number of teeth in primates compared to early mammals?

(2 marks)

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

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

8: How many cusps can be seen on the molar teeth of apes and humans, and how does this compare to other primates?

(2 marks)

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

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

9: What is the advantage to arboreal primates of having an emphasis on vision?

(2 marks)

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

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

10: What changes to the skull, eye and brain occurred to accommodate the emphasis on vision?

(5 marks)

*……………………………………………………….*

*……………………………………………………….*

*……………………………………………………….*

*……………………………………………………….*

*……………………………………………………….*

11: What is the function of the cerebral cortex and what trend can be seen in the cerebral cortex from lemurs to monkeys to apes to humans?

(3 marks)

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

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

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

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

12: How are cerebral cortex size and the need for high parental care over a long period linked?

(4 marks)

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

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

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

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



13: Gene mutations occur via base deletion, substitution or insertion. For each, list one genetic disease that is caused in this way.

(3 marks)

A: Disease caused by base deletion: *…………………………………………………*

B: Disease caused by base substitution: *……………………………………………..*

C: Disease caused by base insertion: *……………………………………………….*

Go back and mark your work using the marking key provided. What score did you get? /33

*I included enough detail and scientific terminology 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.*