Subject: Science		
KS3	Teacher: Mr Gillman	Term: 3
Key Vocabulary: Food chain, food web, organisms, producer, omnivore, carnivore, herbivore, co-exist, ecosystem, habitat, community, niche, survive, competition, adapt, survive, nocturnal, fittest, evolution, Darwin, variation, inherited, environmental, DNA Gamete, zygote, allele, dominant, recessive, homozygous, heterozygous, genotype, phenotype	**Alternative Learning Environments** (eg FREE forest school, field, playground, park, woods, English Heritage, shop, swallow aquatics, garden centre, Rochester Museum): Playground, music room, forest school	**Resources:** Power points, IWB, WS, laptops, punnet squares, card, Bunsen burner, tripod, heat proof mat, gauze, beaker

Unit Aim: To explore and learn about adaptation

Week	Session 1	Session 2	Session 3
1 Ecosystems	**Lesson Objective** To revise how a food chain works and food webs work **Activities** Create food chain and food webs in books and or for display	**Lesson Objective** To know the difference between habitats and communities **Activities** Define habitats and communities. Research different echo systems	**Lesson Objective** To use a quadrat and investigate/compare species from 2 different areas **Activities** Investigate the types of species found on the field and in forest school
2 Adaptation	**Lesson Objective** To learn about competition and survival **Activities** Create a mind map on what animals need to survive. Discover what animal compete for	**Lesson Objective** To learn how species have adapted over time **Activities** Draw and label how animals have adapted to survive.	**Lesson Objective** To research a nocturnal animal and how they survive **Activities** Research the definition of nocturnal and a particular animal re. where/when do they sleep, when and what do they eat

3 Darwin's Theory	**Lesson Objective** To understand Darwin's theory of "The survival of the fittest" **Activities** Investigation that shows what organisms need for their environment in order to survive	**Lesson Objective** To understand Darwin's theory of "Evolution" **Activities** Draw a display showing the understanding of evolution	**Lesson Objective** To understand how Moths have adapted over time to survive **Activities** Learn about the peppered moths and how they evolved to survive
4 Variation	**Lesson Objective** To learn about the different types of variation **Activities** Learn and provide real life examples of inherited variation and environmental variation	**Lesson Objective** To research variation in a type of species **Activities** Independent research about variation to produce top trump cards	**Lesson Objective** To investigate if arm span is related to height **Activities** Conduct an investigation to see if arm span is correlated to height
5 DNA and Genes	**Lesson Objective** To understand what DNA is **Activities** Research and learn about what DNA is	**Lesson Objective** To understand the coded used for DNA **Activities** Cracking "chromosome codes"	**Lesson Objective** To investigate DNA from a Kiwi **Activities** Using the correct apparatus, pupils will extract DNA from a kiwi
6 Inheritance	**Lesson Objective** To research the keywords of Inheritance and what they mean **Activities** Research and define the key words linked with inheritance	**Lesson Objective** To sort genotypes **Activities** Using the key words researched, pupils will arrange genotypes what is inherited	**Lesson Objective** To understand genetic crosses **Activities** Using genetic Crosses to determine the probability of what an offspring may inherit.
7	**Lesson Objective** To understand how to use punnet squares	**Lesson Objective** Entry Level Test	**Lesson Objective** Entry level coursework

Inheritance	**Activities** Use grids to help us understand dominant and recessive genes	**Activities** Participate in the assessment for their entry level certificate	**Activities** Participate in the coursework for their entry level certificate