



Subject Science Today (WJEC) Key Stage 4
Year 10



	HALF TERM 1	HALF TERM2	HALF TERM3	HALF TERM 4	HALF TERM 5	HALF TERM 6
Topic Titles	Ac1.1 Introduction to Animal Care. Know basic animal requirements. LO4 - Be able to care for animals.	LO2 Health and Sickness of animals	LO3 Breeding Animals	LO1 - Know the requirements of plants for healthy growth. LO2 Be able to propagate a plant	LO3 Be able to care for a plant, maintaining healthy growth	LO4 Be able to produce a food/flower crop.
Objectives (The things we want the pupils to make progress in)	Learners must have an overview of what the 5 freedoms of the Animal Welfare Act 2006 are. Learners should be able to explain to another why animals need these basic needs and how we can deliver them. To be able to independently care appropriately for a range of animals	To identify the food requirements of different animals and the signs and symptoms of ill-health.	Know the purpose in breeding animals	. Requirements of a plant for healthy growth (to include requirement for germination) • Water • Warmth • Light • Plant food • Control weeds/pests. Positioning and preparation of seed beds/ seed trays; • Use of propagators to germinate seeds; • Spacing of seeds; • Seed depth.	Repot; • Thin out; • Plant food/fertilisers; • Water requirements; • Identify common plant pests/diseases of plants (e.g. greenfly, 'rust'); • Control common pests; • Identify common weeds/ Control weeds Learners should demonstrate their skills by propagating and maintaining healthy growth in one plant/crop.	Produce one or more food/flower crops to show basic principles of control and management; • Harvesting.
Key Terms	Five Freedoms, Animal Welfare, Legislation, DEFRA, RSPCA, Health and Safety, Predators, Rodents, Ragwort	health, disease, infection, parasitic	Reproduction in animals; • Breeding; • Reasons for selective breeding (e.g. cows – improve milk production, chickens for egg production or meat, cattle for meat production, dog breeding for variety of characteristics); • Characteristics of different breeds of selected animals	photosynthesis, propagate, germinate, seeds	propagate, germinate, seeds	Harvest, crops
Stage 2 Entry Level 3	Learners could describe on paper, a minimum of three basic 'animal needs' for survival. To do this they will create a poster using guidance from the Animal Welfare Act (2006), DEFRA, RSPCA and HSE guidance. Learners must assist in the care of an animal consistently for at least one week. Learners should demonstrate care for an animal. To complete a daily Journal with diary and images. Produce a document showing how to care for a chosen animal ensuring that they meet all requirements of the Animal Welfare Act (2006). Describe and produce suitable enrichment activities and resources for their chosen animal, explaining the health and fitness benefits they produce.	Learners must state how often an animal need feeding. They should be able to identify the different food and fibre that the animal requires and how often they should be fed. Learners could describe the food and watering requirements of an animal. Learners must list symptoms of ill health in an animal. They should be able to identify the typical symptoms of disease or parasitic infection in animals. They could look at different ways of identifying good health in animals.	Learners must state a purpose in the selective breeding of an animal. Learners must understand Selective breeding (also called artificial selection) is the process by which humans use animal breeding and plant breeding to selectively develop particular phenotypic traits (characteristics) by choosing which typically animal or plant males and females will sexually reproduce and have offspring together. They should Describe the purpose in the selective breeding of an animal and Describe the different characteristics of two different breeds of an animal. Learners must highlight the advantages and disadvantages of selective breeding.	List the requirements of plants for healthy growth. State the requirements of plants to maintain healthy growth and Select appropriate tools and prepare a seed bed. . Learners should demonstrate their knowledge by examining the requirements of a particular plant. they should assist in the preparation of a seed bed and Follow instructions to sow seeds for one type of plant. Select an appropriate sowing technique to sow two different types of seed and Correctly position a plant for healthy growth	Assist in the care of seedlings. Follow instructions to maintain the healthy growth of a plant. Select and use appropriate techniques to care for seedlings. Care for a plant to maintain healthy growth. Control a common weed or pest.	Produce a food or flower crop from seed. Harvest a food or flower crop from seed or from cuttings. Completed unit evidencing every criteria for Level
Stage 1 Entry Level 2	They will learn how to ensure that these are fulfilled. Learners must list a minimum of three basic 'animal needs' for survival. Learners should be able to explain to another why animals need these basic needs and how we can deliver them. Learners could List on paper, a minimum of three basic 'animal needs' for survival. To do this they will create a poster using guidance from the Animal Welfare Act (2006), DEFRA, RSPCA and HSE guidance. Learners must assist in the care of an animal consistently for at least one week. Learners should demonstrate care for an animal. To complete a daily Journal with diary and images.	Learners must state how often an animal need feeding. They should be able to identify the different food and fibre that the animal requires and how often they should be fed. Learners could describe the food and watering requirements of an animal. Learners must list symptoms of ill health in an animal.	Learners must State a purpose in the selective breeding of an animal. They should Describe the purpose in the selective breeding of an animal and Describe the different characteristics of two different breeds of an animal. Selective breeding (also called artificial selection) is the process by which humans use animal breeding and plant breeding to selectively develop particular phenotypic traits (characteristics) by choosing which typically animal or plant males and females will sexually reproduce and have offspring together.	List the requirements of plants for healthy growth. Assist in the preparation of a seed bed and Follow instructions to sow seeds for one type of plant. Produce a diary with images showing your planting and growing.	Assist in the care of seedlings. Follow instructions to maintain the healthy growth of a plant.	Produce a food or flower crop from seed. Harvest a food or flower crop from seed or from cuttings. Completed unit evidencing every criteria for Level