

Title	Demonstrate knowledge of companion animal anatomy, cells, body tissues and systems		
Level	3	Credits	6

Purpose	<p>This unit standard is intended for people working in an animal care context.</p> <p>People credited with this unit standard are able to identify and describe the structures and components of animal cells, the passage of materials into and out of cells, tissue types, blood, and blood cell types; describe the skeletal anatomy, muscles, tendons, and integument of a companion animal; describe body systems, endocrine glands, specialised body fluids, monogastric digestion, and homeostasis in an animal; and describe the main anatomical components and functions of special senses in an animal.</p>
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Classification	Animal Care and Handling > Animal Care
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Available grade	Achieved
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Guidance Information

Definition

Companion animals refer to a pet or other domestic animal.

Outcomes and performance criteria

Outcome 1

Identify and describe the structures and components of animal cells, the passage of materials into and out of cells, tissue types, blood, and blood cell types.

Performance criteria

- 1.1 Identify and describe the function of animal cell structures and components.
- Range nucleus, cytoplasm, cell membrane.
- 1.2 Describe the processes involved with diffusion and osmosis, active transport, and phagocytosis.
- 1.3 Describe the function of tissue types found in the animal's body.
- Range epithelial, muscular, connective, nervous.

1.4 Describe the composition and function of blood.

1.5 Describe the function of blood cell types.

Range erythrocytes, leucocytes, thrombocytes.

Outcome 2

Describe skeletal anatomy, muscles, tendons, and integument of a companion animal.

Performance criteria

2.1 Describe the function of bone and muscle.

2.2 Describe the location of the bones which make up the skeleton of an animal.

Range axial skeleton – cranium, maxilla, mandible;
vertebrae – cervical, thoracic, lumbar, sacral, coccygeal;
ribs, sternum;
appendicular skeleton – scapula, humerus, radius and ulna, pelvis,
femur, tibia, fibula.

2.3 Describe the location of the joints in an animal.

Range includes but is not limited to – stifle joint;
evidence is required for at least five.

2.4 Describe the location of muscles and tendons in an animal

Range includes but is not limited to – quadriceps femoris, achilles tendon;
evidence is required for five.

2.5 Describe the components and function of the integument of an animal.

2.6 Describe the anatomy of an animal using directional terms.

Range cranial, caudal, ventral, dorsal, medial, lateral, proximal, distal,
plantar, palmar, rostral.

Outcome 3

Describe body systems, endocrine glands, specialised body fluids, monogastric digestion, and homeostasis in an animal.

Performance criteria

3.1 Describe the main anatomical components and primary functions of body systems.

Range cardiovascular, respiratory, urinary, gastro-intestinal, reproductive,
lymphatic, nervous.

3.2 Describe the location of endocrine glands, and the hormones which they produce.

Range pituitary, thyroid, parathyroid, adrenals, pancreas, ovary, testes.

3.3 Describe the location of specialised body fluids, association with organs, and their function.

Range digestive juices including bile, cerebro-spinal fluid, sweat.

3.4 Describe the physiology, process, and enzymes involved in, monogastric digestion.

3.5 Describe the way homeostasis is achieved through integration of body systems.

Range temperature, pH, water.

Outcome 4

Describe the main anatomical components and functions of special senses in an animal.

Performance criteria

4.1 Describe the main anatomical components and functions of special senses.

Range sight, hearing, olfactory, vestibular, touch.

Planned review date	31 December 2023
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	8 August 1996	31 December 2019
Revision	2	19 November 1998	31 December 2019
Revision	3	7 June 2000	31 December 2019
Revision	4	16 October 2002	31 December 2019
Rollover and Revision	5	25 June 2007	31 December 2019
Review	6	1 November 2018	N/A

Consent and Moderation Requirements (CMR) reference	0228
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the Primary ITO standards@primaryito.ac.nz if you wish to suggest changes to the content of this unit standard.