Skills Instructions

- Select **ONE** of the following ways to *describe* each skill within the designated case log.
 - Physiological effect the skill had on the patient
 - o Rationale for using the skill in the case
 - o Troubleshooting a problem or adverse event and what was done to solve the issue
 - o Role the skill played in the overall management of the case
 - o Set-up of equipment
 - o Information about performing skill

NOTE: Select the best option to describe each signed skill so that it fits within the contents of the case. The skill descriptions should NOT overshadow the information provided about the case.

- Only provide **ONE** case log per skill. The designated case log should be the BEST representation of that skill. If the skill is not described within the designated case log it will be rejected even if it is described elsewhere in the case logs.
- When asked, fill in additional information for skill on form.
 - Anesthesia phase refers to premedication, induction, maintenance or recovery.

| Anestnesia phase refers to premedication, induction, maintenance of recovery | · | |
|--|--------------------------------------|----------------------|
| Small Animal Core Skills 90% mastery required (63 of 72) | Representative Case Log Number | Location Mastered |
| Pharmacology | | |
| Administer and describe the use of an inhalant anesthetic via precision vaporizer. Indicate inhalant: | | |
| Administer and describe the use of an anticholinergic. Indicate anesthesia phase drug was used: | | |
| 3. Administer and describe the use of a phenothiazine. Indicate anesthesia phase drug was used: | | |
| 4. Administer and describe the use of a pure agonist opioid. Indicate anesthesia phase drug was used: | | |
| Administer and describe the use of an agonist/antagonist opioid. Indicate anesthesia phase drug was used: | | |
| 6. Administer and describe the use of a partial agonist opioid. Indicate anesthesia phase drug was used: | | |
| 7. Administer and describe the use of an alpha-2 adrenergic agonist. Indicate anesthesia phase drug was used: | | |
| 8. Administer and describe the use of a benzodiazepine. Indicate anesthesia phase drug was used: | | |

| Small Animal Core Skills 90% mastery required (63 of 72) | Representative Case Log Number | Location Mastered |
|--|--------------------------------------|----------------------|
| Administer and describe the use of a dissociative anesthetic agent used as part of an induction protocol. | | |
| 10. Administer and describe the use of etomidate as an induction agent. | | |
| 11. Administer and describe the use of alfaxalone as an induction agent. | | |
| 12. Administer and describe the use of propofol as an induction agent. | | |
| 13. Administer and describe the use of a multimodal analgesic protocol during the maintenance phase of balanced anesthesia. | | |
| Administer and describe the use of an inhalant plus an analgesic CRI during the maintenance phase of anesthesia. Indicate the analgesic drug used as the CRI: | | |
| 15. Administer and describe the use of a non-steroidal anti-inflammatory agent. Indicate anesthesia phase drug was used: | | |
| 16. Administer and describe the use of an opioid continuous rate infusion. Indicate anesthesia phase drug was used: | | |
| 17. Administer and describe the use of an opioid antagonist. | | |
| 18. Administer and describe the use of an alpha-2 antagonist. | | |
| 19. Administer and describe the use of an antiarrhythmic drug. Indicate anesthesia phase drug was used: | | |
| 20. Administer and describe the use of a positive inotrope. | | |
| Indicate anesthesia phase drug was used: | | |
| Physiology and Physiologic Respon | se | |
| 21. Identify and describe an adverse cardiovascular reaction involving heart rate (e.g. bradycardia, tachycardia, arrhythmias, etc.). | | |
| Indicate anesthesia phase it occurred: | | |

| Small Animal Core Skills 90% mastery required (63 of 72) | Representative Case Log Number | Location Mastered |
|--|--------------------------------------|----------------------|
| 22. Identify and describe an adverse respiratory complication involving oxygenation (e.g. respiratory distress, hypoxemia, apnea, etc.). | | |
| Indicate anesthesia phase it occurred: | | |
| 23. Identify and describe an adverse cardiovascular complication involving blood pressure (e.g. hypotension, hypertension, etc.). | | |
| Indicate anesthesia phase it occurred: | | |
| 24. Identify and describe an adverse respiratory complication involving ventilation (e.g. hypercapnia, hypocapnia, apnea, etc.). | | |
| Indicate anesthesia phase it occurred: | | |
| 25. Administer and describe the use of IV crystalloid fluid therapy during anesthesia. Indicate fluid type: | | |
| 26. Administer and describe the use of IV synthetic colloid fluid therapy. Indicate fluid type: | | |
| 27. Administer and describe the use of IV blood components during anesthesia. Indicate blood product: | | |
| Equipment Use and Understanding | g | |
| 28. Setup, operate and describe use of an esophageal stethoscope to assess heart rate and respiratory rate. | | |
| 29. Setup, operate and describe use of a pulse oximeter to indirectly assess oxygenation. | | |
| 30. Setup, operate and describe use of continuous ECG monitoring to assess heart rate and rhythm. | | |
| 31. Setup, operate and describe use of nasal, esophageal, or rectal temperature probe to assess body temperature | | |
| 32. Setup, operate and describe use of external active warming device. Indicate device used: | | |
| 33. Setup, operate and describe use of a capnograph or capnometer to indirectly assess ventilation. | | |
| 34. Setup, operate and describe use of an occlusion cuff and Doppler flow probe to indirectly assess blood pressure. | | |

| Small Animal Core Skills 90% mastery required (63 of 72) | Representative Case Log Number | Location Mastered |
|--|--------------------------------------|----------------------|
| 35. Setup, operate and describe use of an oscillometric blood pressure monitoring device to indirectly assess blood pressure. | | |
| 36. Setup, operate and describe the use of an indwelling arterial catheter attached to a pressure transducer or aneroid manometer to directly assess blood pressure. | | |
| 37. Setup, operate and describe the use of a rebreathing system. Indicate oxygen flow rate used: | | |
| 38. Setup, operate and describe the use of a non-rebreathing system. Indicate oxygen flow rate used: | | |
| 39. Properly use and describe function or setup of these anesthesia machine components: oxygen cylinder, vaporizer and flow meter. | | |
| 40. Properly use and describe function or setup of these anesthesia machine components: CO2 absorbent canister and one way valves. | | |
| 41. Setup, operate and describe use of a mechanical ventilator. Indicate ventilator model: | | |
| 42. Setup, operate and describe use of a waste gas scavenging system (active or passive). | | |
| 43. Use a laryngoscope to perform endotracheal intubation and describe technique. | | |
| 44. Setup, operate and describe use of a fluid pump. Indicate fluid pump model: | | |
| 45. Setup, operate and describe use of a syringe pump. | | |
| Indicate syringe pump model: | | |
| 46. Setup, operate and describe operation of a rebreathing circuit using low flow oxygen flow rates. Indicate oxygen flow rate used: | | |
| 47. Properly select and describe choice of an endotracheal tube based on diameter and length. | | |

Small Animal <u>Core</u> Skills

Representative Case Log Number

Location Mastered

| 90% mastery requirea (63 of 72) | | |
|--|------|--|
| Laboratory Sample Collection and Analy | ysis | |
| 48. Collect blood sample for blood glucose levels and describe interpretation of results. | | |
| 49. Collect blood sample for PCV and total protein and describe interpretation of results. | | |
| 50. Collect blood sample (arterial or venous) for blood gas analysis and describe interpretation of results. | | |
| Skills and Techniques | | |
| 51. Auscultate thorax to assess cardio-respiratory function and describe rationale for performing. | | |
| 52. Apply manual intermittent positive pressure ventilation (IPPV) during the anesthetic procedure and describe rationale for use. | | |
| 53. Perform pre-oxygenation and describe rationale for use. | | |
| 54. Perform endotracheal intubation in the canine and describe technique. Indicate method used to confirm proper placement: | | |
| 55. Perform endotracheal intubation in the feline and describe technique. Indicate method used to confirm proper placement: | | |
| 56. Perform proper inflation of the endotracheal tube cuff and describe technique. Indicate type of cuff: | | |
| 57. Utilize a stylet or guide tube to assist with intubation and describe rationale for use. | | |
| 58. Perform extubation and describe technique with regards to specific species or breed requirements. | | |
| 59. Perform subcutaneous injection. Indicate drug administered, location and reason for selecting this route of administration | | |

| Small Animal Core Skills 90% mastery required (63 of 72) | Representative Case Log Number | Location Mastered |
|---|--------------------------------------|----------------------|
| 60. Perform intramuscular injection. Indicate drug administered, location and reason for selecting this route of administration. | | |
| 61. Perform intravenous injection. Indicate drug administered, location and reason for selecting this route of administration. | | |
| 62. Perform and describe placement of an arterial catheter, including location placed. | | |
| 63. Perform an describe placement of a peripheral IV catheter, including location placed. | | |
| 64. Perform and describe assessment of palpating a peripheral pulse, including location used. | | |
| 65. Perform and describe placement of a jugular catheter, indicate reason for placement. | | |
| 66. Perform and describe placement of an epidural injection, including drugs and dosages used. | | |
| 67. Perform and describe placement of a local or regional block other than an epidural, including drugs and dosages used. Indicate block performed: | | |
| 68. Perform and describe placement of dental nerve blocks, including drugs and dosages used. Indicate block performed: | | |
| 69. Assign a pain score using a pain scoring system and describe assessment of pain. Indicate pain scoring system used: | | |
| 70. Administer analgesic therapy and describe response to therapy using a pain scoring system. Indicate pain scoring system used: | | |
| 71. Actively participate and describe your role as part of the team that administers Cardiopulmonary Resuscitation (CPR) to a patient. | | |
| 72. Administer and describe the use of emergency drugs used during cardiopulmonary arrest. | | |

| Small Animal Supplemental Skills 50% mastery required (11 of 24) | Representative Case Log Number | Location Mastered |
|---|--------------------------------------|----------------------|
| Identify presence of regurgitation and describe plan to initiate treatment during general anesthesia. | | |
| 2. Administer and describe the use of a benzodiazepine reversal agent. | | |
| 3. Administer and describe use of a second inhalant anesthetic via precision vaporizer. Indicate inhalant: | | |
| 4. Administer and describe the effects of thiopental as an induction agent. | | |
| 5. Administer and describe the use of a non-depolarizing neuromuscular blocking agent. | | |
| 6. Apply a peripheral nerve stimulator and describe the train of four technique to determine duration of neuromuscular blockade. | | |
| 7. Use a peripheral nerve stimulator to perform a regional nerve block and describe technique. Indicate nerve block performed: | | |
| Administer and describe the use of an anticholinesterase inhibitor to reverse a non-depolarizing neuromuscular blocking agent. | | |
| 9. Administer and describe the use of a vasopressor. Indicate anesthesia phase drug was used: | | |
| 10. Administer and describe the use of a total intravenous anesthesia (TIVA) protocol for maintenance of anesthesia, including drugs and dosages used. | | |
| 11. Perform and describe use of central venous pressure (CVP) monitoring using a water manometer or pressure transducer to assess volume resuscitation efforts. | | |
| 12. Setup, operate and describe use of an anesthetic gas analyzer monitor. | | |
| 13. Administer and describe the use of a secondary carrier gas (e.g. heliox, medical air, nitrous oxide). Indicate carrier gas: | | |

| Small Animal Supplemental Skills 50% mastery required (11 of 24) | Representative Case Log Number | Location Mastered |
|--|--------------------------------------|----------------------|
| 14. Setup, operate and describe use of a Positive End Expiratory Pressure (PEEP) valve. | | |
| 15. Perform endotracheal intubation in a third species and describe technique. Indicate species: | | |
| Perform endotracheal intubation in a fourth species and describe technique. Indicate species: | | |
| 17. Perform and describe use of an alternative method of intubation (e.g. nasotracheal, V-gel, LMA, pharyngostomy tube, retrograde intubation, etc.). Indicate method used: | | |
| 18. Collect blood sample (arterial or venous) for colloid oncotic pressure or lactate analysis and describe interpretation of results. | | |
| 19. Perform and describe placement of an epidural catheter, including drugs and dosages used. | | |
| 20. Administer and describe use of an IV opioid induction. | | |
| 21. Administer and describe use of an IV agonist/antagonist opioid as a partial reversal to a mu agonist opioid. | | |
| 22. Setup, operate and describe use of a spirometer to obtain pressure-volume or flow-volume loops. | | |
| 23. Perform and describe intubation technique for one lung ventilation. | | |
| 24. Administer and describe the use of two drugs used as co-induction agents. | | |

FOR AVTAA USE ONLY

Demonstrate ability to assign appropriate ASA status after reviewing patient history, PE and diagnostic results in collaboration with veterinarian.

Demonstrate ability to use all information to formulate an acceptable and patient-specific anesthetic plan.

Demonstrate ability to assess proper anesthetic depth and adjust protocol according to signs. (e.g., eye position, palpebral reflex, jaw tone, etc).

Maintain complete and accurate individual patient anesthesia records (e.g., drugs used, parameters monitored, events during anesthesia properly documented, etc).

Demonstrate ability to calculate:

- Drug dose (mg or mcg) and mL volume for single injection
- CRI (amount of drug to add to diluent and mL/hr rate or amount of drug needed for syringe pump)
- Fluid rate (mL/hr and drips/sec)

* Each of these calculations should be shown at least once in the case logs or case reports

Demonstrate ability to properly dilute drugs utilizing the stock solution to achieve a new concentration. Examples can be provided for single injection, continuous rate infusion or drug placed in fluid bag.