

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
 - Rationale for using the skill in the case
 - Troubleshooting a problem or adverse event and what was done to solve the issue
 - Role the skill played in the overall management of the case
 - Set-up of equipment
 - 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.
- **Anyone who initials a skill(s) MUST also sign and provide credentials at the end of the form!**

Large Animal Core Skills

90% Mastery Required (54 of 61)

Representative
case #

Initials of
board
certified
DVM or
VTS

Pharmacology

1. Administer and describe the use of an inhalant anesthetic via precision vaporizer. Indicate inhalant: _____		
2. Administer and describe the use of a phenothiazine. Indicate anesthesia phase drug was used: _____		
3. Administer and describe the use of a pure agonist opioid. Indicate anesthesia phase drug was used: _____		
4. Administer and describe the use of an agonist/antagonist or a partial agonist opioid. Indicate anesthesia phase drug was used: _____		
5. Administer and describe the use of an alpha-2 adrenergic agonist. Indicate anesthesia phase drug was used: _____		
6. Administer and describe the use of a benzodiazepine. Indicate anesthesia phase drug was used: _____		
7. Administer and describe the use of IV ketamine plus a benzodiazepine as an induction protocol.		

Large Animal Core Skills

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8. Administer and describe the use of a dissociative anesthetic agent used in conjunction with another agent, other than a benzodiazepine, for induction.

Indicate other drug used: _____

9. Administer and describe the use of IV guaifenesin as part of an induction protocol.

10. Administer and describe the use of IV propofol as an induction agent.

11. Administer and describe the use of an IV opioid continuous rate infusion during the maintenance phase of anesthesia.

Indicate opioid used: _____

12. Administer and describe the use of an inhalant plus an analgesic CRI (other than an opioid) during the maintenance period of anesthesia.

Indicate analgesic drug used as the CRI: _____

13. Administer and describe the use of a TIVA protocol for maintenance of anesthesia, including drugs used.

14. Administer and describe the use of a non-steroidal anti-inflammatory agent.

Indicate anesthesia phase drug was used: _____

15. Administer and describe the use of a local anesthetic.

Indicate anesthesia phase drug was used: _____

16. Administer and describe the use of a positive inotrope.

Indicate anesthesia phase drug was used: _____

17. Administer and describe the use of a vasopressor.

Indicate anesthesia phase drug was used: _____

<div> <div>Large Animal <u>Core</u> Skills</div> <div>90% Mastery Required (54 of 61)</div> </div>	Representative case #	Initials of board certified DVM or VTS
<div>Physiology and Physiologic Response</div>		
<div>18. Identify and describe an adverse cardiovascular reaction involving heart rate (e.g. bradycardia , tachycardia, arrhythmias, etc.).</div> <div>Indicate anesthesia phase it occurred: _____</div>		
<div>19. Identify and describe an adverse cardiovascular complication involving blood pressure (e.g. hypotension, hypertension, etc.).</div> <div>Indicate anesthesia phase it occurred: _____</div>		
<div>20. Identify and describe an adverse respiratory complication involving ventilation or oxygenation (e.g. hypercapnia, hypocapnia, apnea, respiratory distress, etc.).</div> <div>Indicate anesthesia phase it occurred: _____</div>		
<div>21. Administer and describe the use of IV crystalloid fluid therapy during anesthesia.</div> <div>Indicate fluid type: _____</div>		
<div>22. Administer and describe the use of IV synthetic colloid fluid therapy.</div> <div>Indicate fluid type: _____</div>		
<div>23. Administer and describe the use of IV blood components during anesthesia.</div> <div>Indicate blood product: _____</div>		
<div>Equipment Use and Understanding</div>		
<div>24. Describe use of a pulse oximeter to indirectly assess oxygen saturation.</div>		
<div>25. Describe use of continuous ECG monitoring to assess heart rate and rhythm.</div>		
<div>26. Describe use of nasal, esophageal, or rectal temperature probe to assess body temperature.</div>		
<div>27. Describe use of external active warming device.</div> <div>Indicate device used: _____</div>		
<div>28. Describe use of a capnograph or capnometer to indirectly assess ventilation.</div>		

<p align="center">Large Animal <u>Core</u> Skills <i>90% Mastery Required (54 of 61)</i></p>	<p align="center">Representative case #</p>	<p align="center">Initials of board certified DVM or VTS</p>
29. Describe use of an occlusion cuff and Doppler flow probe to indirectly assess blood pressure.		
30. Describe use of an oscillometric blood pressure monitoring device to indirectly assess blood pressure.		
31. Describe the use of an indwelling arterial catheter attached to a pressure transducer or aneroid manometer to directly assess blood pressure.		
32. Describe the use of a rebreathing system. Indicate oxygen flow rate used: _____		
33. Describe proper function or setup of these anesthesia machine components: oxygen cylinder, vaporizer and flow meter.		
34. Describe proper function or setup of these anesthesia machine components: CO2 absorbent canister and one way valves.		
35. Describe use of a mechanical ventilator. Indicate ventilator model: _____		
36. Describe use of a waste gas scavenging system (active or passive).		
37. Describe the use of an oxygen demand valve. Indicate anesthesia phase it was used: _____		
38. Describe the technique of providing supplemental oxygen via nasal insufflation. Indicate anesthesia phase it was used: _____		
39. Describe proper use of a laryngoscope for endotracheal intubation.		
40. Describe proper selection of an endotracheal tube for patient. Indicate species used: _____		
<p align="center">Laboratory Sample Collection & Analysis</p>		
41. Collect blood sample (arterial or venous) for blood gas analysis and interpret results.		

<p>Large Animal <u>Core</u> Skills <i>90% Mastery Required (54 of 61)</i></p>	<p>Representative case #</p>	<p>Initials of board certified DVM or VTS</p>
42. Collect blood sample for blood glucose levels and interpret results.		
43. Collect blood sample for PCV and total protein and interpret results.		
<p>Skills and Techniques</p>		
44. Describe endotracheal intubation in the equine.		
45. Describe endotracheal intubation in a second large animal species. Indicate species: _____		
46. Describe use of nasotracheal intubation. Indicate species: _____		
47. Describe appropriate patient extubation time in regards to specific species requirements. Indicate species: _____		
48. Describe proper inflation of the endotracheal tube cuff.		
49. Describe proper use of a stylet or guide tube to assist with intubation.		
50. Describe rationale for auscultating thorax to assess cardio-respiratory function.		
51. Describe the use of manual intermittent positive pressure ventilation (IPPV) during the anesthetic procedure.		
52. Perform subcutaneous injection. Indicate drug administered, location and reason for selecting this route of administration.		
53. Perform intramuscular injection. Indicate drug administered, location and reason for selecting this route of administration.		
54. Perform intravenous injection. Indicate drug administered, location and reason for selecting this route of administration.		

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55. Describe placement of a jugular catheter. Indicate reason for placement.		
56. Describe placement of an arterial catheter including location placed.		
57. Describe assessment of palpating a peripheral pulse, including location used.		
58. Describe assessment of pain and assign a pain score using a pain scoring system. Indicate pain scoring system used: _____		
59. Administer analgesic therapy and describe response to therapy using a pain scoring system. Indicate pain scoring system used: _____		
60. Describe your role as part of the team that administers Cardiopulmonary Resuscitation (CPR) to a patient.		
61. Administer and describe the use of emergency drugs used during cardiopulmonary arrest.		

Large Animal Supplemental Skills

50% Mastery Required (10 of 21)

Representative
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1. Administer and describe the use of anticholinergic.

Indicate anesthesia phase drug was used: _____

2. Administer and describe the use of an alpha-2 agonist continuous rate infusion.

Indicate anesthesia phase drug was used: _____

3. Administer and describe the use of a benzodiazepine reversal agent.

4. Administer and describe the use of an opioid antagonist.

5. Administer and describe the use of thiopental, etomidate or alfaxalone as an induction agent.

Indicate drug used: _____

6. Administer and describe the use of an antiarrhythmic drug.

Indicate anesthesia phase drug was used: _____

7. Administer and describe the use of a non-depolarizing neuromuscular blocking agent.

8. Apply a peripheral nerve stimulator and describe the train of four technique to determine duration of neuromuscular blockade.

9. Administer and describe the use of an anticholinesterase inhibitor to reverse a non-depolarizing neuromuscular blocking agent.

10. Administer and describe use of a second inhalant anesthetic via precision vaporizer.

Indicate inhalant: _____

11. Administer and describe the use of an alpha-1 adrenergic agonist instilled intra-nasally.

12. Administer and describe the use of a beta-2 adrenergic agonist instilled intra-tracheally during IPPV.

Large Animal Supplemental Skills

50% Mastery Required (10 of 21)

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13. Collect blood sample (arterial or venous) for colloid oncotic pressure or lactate analysis and interpret results.

14. Describe use of an anesthetic gas analyzer monitor.

15. Describe use of a Positive End Expiratory Pressure (PEEP) valve.

16. Describe endotracheal intubation in a third species.

Indicate species: _____

17. Describe endotracheal intubation in a fourth species.

Indicate species: _____

18. Describe placement of an epidural injection, including drugs used.

19. Describe placement of an epidural catheter, including drugs used.

20. Describe placement of a local or regional block other than an epidural, including drugs used.

Indicate block performed: _____

21. Name and describe use of a non-rebreathing system.

Indicate oxygen flow rate used: _____

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.

Applicant Name: _____

I, the undersigned, declare that **I have read the entire AVTAA application packet**. I further attest that the above- named applicant has achieved the **AVTAA definition of mastery** for the above skills that are marked with my initials.

_____/_____/_____
Printed Name Signature Initials Credentials

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