**Advanced Animal Science – Growth and Performance – Unit 5 Overview**

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| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
| Overview of Growth and Development  The student will be able to:  -Define growth  -Explain the three ways growth can occur  -Compare and contrast differences in true growth and fattening  - Explain differences in animal growth from past and present  PPT: Intro to growth and development  Activity: KWL and animal timeline | Growth and Development of Tissues  The student will be able to:  -Classify different tissues by their shape and number  -Know the four different types of tissues  -Compare and contrast different functions of tissues  PPT: Tissues | Cell Tissue Lab  The student will be able to:  -Spool DNA using wheat germ  -Observe different cell parts from human check cells  -Observe different cell parts from a red onion  -Observe the structure of a stomach cell  Activity: Cell Tissue Lab  -See additional PDF | Embryonic growth and development  The student will be able to:  -Explain prenatal development from fertilization to birth  -Understand different biological process’ in all phases of prenatal development  -Define key vocabulary  -Chart different phases in somitogenesis  PPT: Embryonic Growth | Fetal development lab  The student will be able to:  -Observe pictures of both cow and human embryos/fetuses  -Interpret graphs to determine when most of the changes in size and mass occur during the gestation period  -Constrast trends in growth and development using length and mass  Activity: Fetal development lab  -Fill in record books |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| Muscle  Student will be able to:  -Define myogenesis  -Explain different ways myogenesis occurs  -Define muscle growth  -Explain different ways muscle growth occurs  -Compare and contrast myogenesis and muscle growth  Activity: Writing the two major definitions within this lesson | Adipose Tissue  Student will be able to:  -Know the four locations fat is deposited  -Explain adipogenesis  -Explain lipogenesis  -Compare and contrast the different factors affecting lipid metabolism | Muscle and Fat Tissue Lab  Student will be able to:  -Label muscle tissue across species  -Label fat tissue across species  -Compare and contrast differences in true growth and fattening  -Explain differences in animal growth from past and present  Activity: Rotational Lab Stations | Bone growth and development  Student will be able to:  -List types of bone  -Know the function of cells involved in bone growth  -Describe the two methods of bone formation in detail  -Explain the factors that affect bone growth |  |
| Day 11 |  |  |  |  |
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