GRADE 5
ANIMAL ORGAN SYSTEMS

OVERVIEW:
Students will explore various organ systems in the body, how they support each other, and the causes/effects of disease on each. Using animal "aprons" and organ cut-outs, students will build the digestive systems of various animals, while observing live animal counterparts in the zoo. They will compare animal systems with the human system.

In the second half of the program, students will use scientific inquiry to measure, record and asses two box turtles that were rescued and rehabilitated here at Riverview. Students will use their observations to investigate the effects of malnutrition, social and environmental factors, and human involvement on the health of the animals, themselves and their environment.

LEARNING OBJECTIVES:
1. Identify, describe and compare various animal digestive systems using animal organ cut-outs to build human, bird, snake, and camel models while viewing live animal counterparts in their zoo environment *(2.3, 3.1, 3.2, 3.3, 3.4)
2. Use scientific inquiry and observation to investigate, measure and assess changes in growth and development of two live zoo turtles that have been rescued and rehabilitated at Riverview Park and Zoo *(2.2, 3.4)
3. Evaluate the effects of technology and social / environmental factors on the health of animals and discuss the effects of human involvement in animal health in and outside of the zoo *(1.1, 1.2, 3.4)
4. Learn and use appropriate scientific vocabulary in oral, written forms *(2.4, 2.5)
5. Follow Riverview Park and Zoo rules for visiting animal exhibits, participation in animal encounters, and safety procedures *(2.1)

***As per Ontario Curriculum – Science and Technology, Grade 5 – Understanding Life Systems, Human Organ Systems.**

RESOURCES:

- ☐ Black board / white board
- ☐ Chalk / markers
- ☐ Human digestive apron & organ cutouts
- ☐ Emu digestive apron & organ cutouts
- ☐ Snake digestive apron & organ cutouts
- ☐ Camel digestive apron & organ cutouts
- ☐ Yarn or rope & scissors
- ☐ Measuring tape
- ☐ Handout
- ☐ Animal Encounter – Box turtles
- ☐ Snake jaw / skull

OUTLINE – OPTION 1:

ON BUS
- Introductions, Orientation & Rules (15 minutes):

PART 1 – INSIDE ACTIVITIES (1 hour)
- Classroom Introduction:
- Classroom Activity:
    - The Human Digestive Apron
    - Measuring the Human Small Intestine

PART 2 – OUTSIDE ACTIVITIES (1 hour)
- Orientation & Rules:
- Animal Visits:
    - Emu Digestive Apron
    - Snake Digestive Apron
    - Camel Digestive Apron

LUNCH & BATHROOM (1/2 hour – 45 minutes)

PART 3 – LIVE ANIMAL INVESTIGATIONS (30-45 minutes)
- Rules for Live Animal Presentations
- Classroom Activity #1 (30 minutes)
    - HANDOUT - Zoo Animal Nutrition and Health Investigation

PART 4 – WRAP UP

OUTLINE - OPTION 2:
Depending on the availability of volunteers / instructors and the number of students in the class, it may be beneficial to split the group in two. Then the timing would be as follows:

Group A	Group B
PART 1 – INSIDE ACTIVITIES	PART 1 – INSIDE ACTIVITIES
PART 2 – OUTSIDE ACTIVITIES	PART 3 – LIVE ANIMAL INVESTIGATION
LUNCH & BATHROOM	LUNCH & BATHROOM
PART 3 – LIVE ANIMAL INVESTIGATION	PART 2 – OUTSIDE ACTIVITIES
WRAP UP	WRAP UP