THE ENDOCRINE SYSTEM
INTERNET RESEARCH AND PEER TEACHING PROJECT

TOTAL POINTS: 150

PURPOSE: To allow each student to learn about the endocrine glands and various organs that comprise the Endocrine System, the hormones produced, effects on the body, and the problems that can be experienced if the endocrine system fails to operate properly. This project is designed to encourage students to strive for learning beyond the “required”. Students will use numerous skills, such as organization, communication in oral and written forms, and Internet research skills to complete this project.

REQUIREMENTS:

1. Each group (NO MORE THAN 2 or 3 IN A GROUP) is to conduct research on ONE of the following:
   • Pituitary Gland (Anterior Lobe and Posterior Lobe)
   • Thyroid Gland
   • Parathyroid Gland
   • Adrenal Gland (Medulla and Cortex)
   • Pineal Gland
   • Pancreas (Pancreatic Islets)
   • Hypothalamus
   • Thymus Gland
   • Ovaries
   • Testes

2. Each Group/Student: Will prepare and present a PowerPoint Presentation. The following information is to be included:

INFORMATION:

1. LOCATION:
   • Where in the body can the glands be located?
   • Diagram/picture required.
2. **SECRETIONS:**
   - What hormones and type of hormones does the gland produce?
   - Are the hormones circulating or local? Explain.
   - Hormone Action? (Opposing, Synergistic, Permissive)

3. **PURPOSE:**
   - What effect do these hormones have on the human body?
   - Why are these hormones important in homeostasis?

4. **FEEDBACK MECHANISMS:**
   - Identify what regulates this gland/organ/hormone. (Nervous system? Chemical changes in the blood? Other hormones?)
   - Is it a negative feedback system or a positive feedback system? Explain.

5. **DISORDERS:**
   - What happens if the gland does not function properly? (Over production/Under production/No production at all?)
   - What can be done medically to correct the problems if the gland is not functioning properly?
   - Pictures

6. **AGING:**
   - How does aging affect your organ? End results?

7. **Miscellaneous** information.

**NO LATE PROJECTS WILL BE ACCEPTED!**