Endocrine System Search

Visit the following sites to answer the questions below.

Site # 1 - What Is the Endocrine System?

http://kidshealth.org/teen/your_body/body_basics/endocrine.html

Questions

1. What are the functions of the endocrine system?

_______________________________________________________________________________

_______________________________________________________________________________

2. What are hormones and what is their function?

_______________________________________________________________________________

_______________________________________________________________________________

3. Which factors affect hormone levels in your blood?

_______________________________________________________________________________

_______________________________________________________________________________

4. What is a gland? Give an example.

_______________________________________________________________________________

_______________________________________________________________________________

5. Are there glands that are part of the endocrine system and another system? Give an example.

_______________________________________________________________________________

_______________________________________________________________________________

6. List the major glands/organs that make up the endocrine system.
7. Label the major parts of the Endocrine System below.

8. Your endocrine system includes all the __________________ in your body that make __________________.

9. The __________________ connects your endocrine system with your nervous system.

10. Which gland is called the “master gland”? Explain why it is given this name.

________________________________________ ______________________________

________________________________________ ______________________________

________________________________________ ______________________________
11. What are the pineal hormones responsible for?

___________________________________________________________________________________

___________________________________________________________________________________

12. What do parathyroids regulate in the blood?

___________________________________________________________________________________

13. Where are adrenal glands located in the body? What is the “fight or flight” response.

___________________________________________________________________________________

___________________________________________________________________________________

Site # 4 – Test Yourself: Use the info in this page to complete the chart.
Hint - Use the Drag and Drop Matching at the bottom of the page to aid you in your quest.
https://www.abpischools.org.uk/topic/hormones/2/1

14. Use the drag and drop activity to complete the following table:

<table>
<thead>
<tr>
<th>Endocrine Gland</th>
<th>Where in the body</th>
<th>Hormone produced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pituitary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Testis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pancreas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adrenal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Click the right arrow to go to the next page
15. Differentiate between the female and male gonads. List their functions, locations and which hormones they produce.

<table>
<thead>
<tr>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. Which endocrine gland starts off the process of puberty? __________________________

17. Which two hormones, produced by this gland, stimulate the production of sex hormones? __________________________

18. What hormone is produced in the testes? __________________________

Site # 5 – Gland Specifics – Endocrine Disorders

https://www.webmd.com/diabetes/endocrine-system-disorders#2-5

Endocrine Disorders: Describe each of the following malfunctions

19. Adrenal Insufficiency: __________________________

20. Cushing Syndrome: __________________________

21. Hypothyroidism: __________________________

22. Type II Diabetes: __________________________
Regents Practice:

1. Hormones and secretions of the nervous system are chemical messengers that
   (1) store genetic information
   (2) carry out the circulation of materials
   (3) extract energy from nutrients
   (4) coordinate system interactions

2. The organ represented by X in the diagram is the
   (1) Pancreas
   (2) Liver
   (3) Gallbladder
   (4) Stomach

3. Which substances are found on cell surfaces and respond to nerve and hormone
   signals?
   (1) starches and simple sugars
   (2) subunits of DNA
   (3) vitamins and minerals
   (4) receptor molecules

4. Feedback interactions in the human body are important because they
   (1) determine the diversity necessary for evolution to occur
   (2) direct the synthesis of altered genes that are passed on to every cell in the
       body
   (3) regulate the shape of molecules involved in cellular communication
   (4) keep the internal body environment within its normal range

5. Cellular communication is illustrated in the diagram shown.

   Information can be sent from
   (1) cell A to cell B because cell B is able to recognize signal 1
   (2) cell A to cell B because cell A is able to recognize signal 2
   (3) cell B to cell A because cell A is able to recognize signal 1
   (4) cell B to cell A because cell B is able to recognize signal 2
6. The labeled organs in the diagram are part of which body system?
   (1) Respiratory
   (2) Digestive
   (3) Endocrine
   (4) circulatory

7. What is represented by the sequence below?

   Ingestion of starch → Elevated blood sugar levels → Secretion of insulin increased → Drop in blood sugar levels → Secretion of insulin decreased

   (1) a feedback mechanism in multicellular organisms
   (2) differentiation of organic molecules
   (3) an immune response by cells of the pancreas
   (4) the disruption of cellular communication

8. The most immediate response to a high level of blood sugar in a human is an increase in the
   (1) muscle activity in the arms
   (2) blood flow to the digestive tract
   (3) activity of all cell organelles
   (4) release of insulin

The diagram below shows human body structures that are coordinated to maintain homeostasis.

9. Which row correctly identifies the functions of these structures?

<table>
<thead>
<tr>
<th>Row</th>
<th>Body System X</th>
<th>Organ Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Digestion</td>
<td>Regulation</td>
</tr>
<tr>
<td>(2)</td>
<td>Circulation</td>
<td>Synthesis</td>
</tr>
<tr>
<td>(3)</td>
<td>Excretion</td>
<td>Transport</td>
</tr>
<tr>
<td>(4)</td>
<td>Locomotion</td>
<td>Nutrition</td>
</tr>
</tbody>
</table>