THE ENDOCRINE SYSTEM

5th Grade

The mission of Polk County Schools is to provide a high-quality education for all students.



CHAMPS EXPECTATIONS

C Conversation: Voice level 0

H Help: Raise your hand for help.

A Activity: Whole group instruction

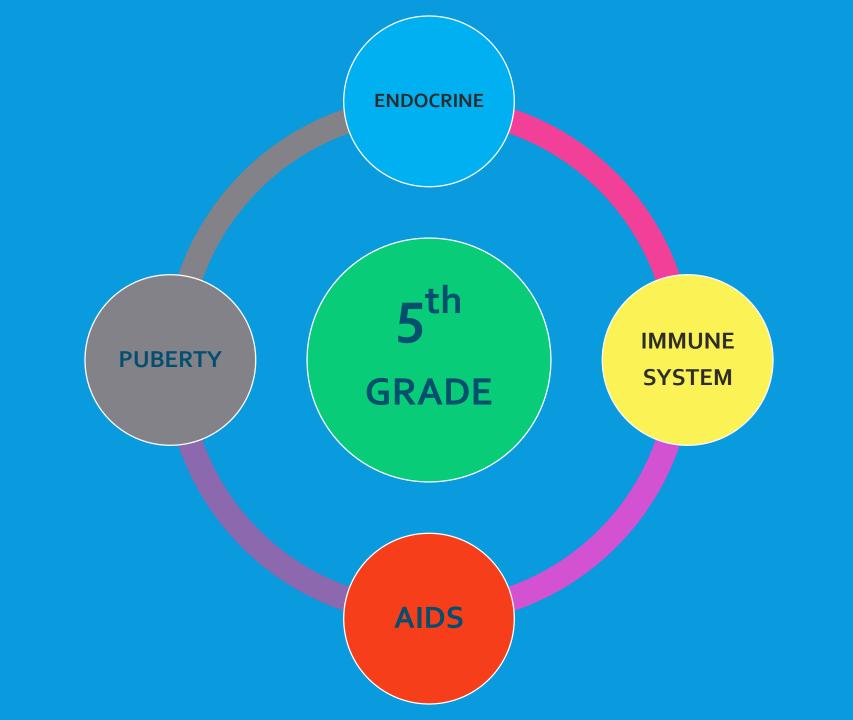
Movement: It is expected that you will remain in your seat. Please, raise your

hand if you need an EMERGENCY bathroom break.

P Participation: I expect everyone to sit up, ask appropriate questions

and raise your hand to answer questions.

S Success: Increased knowledge!!



Essential Questions

What is the endocrine system?

What are the names and function of three endocrine glands?

What are two effects of hormones on growth and development?

ENDOCRINE SYSTEM VOCABULARY

<u>adrenal glands</u> – located on the top of each kidney, they produce the hormone adrenaline which prepares the body for emergency action. It is produced in times of fear, stress, anger, or excitement.

<u>endocrine system</u> – the system that has chemical control of the body through the action of glands which produce hormones.

<u>hormones</u> – chemical messengers produced by special organs called glands that bring about physical changes in the body.

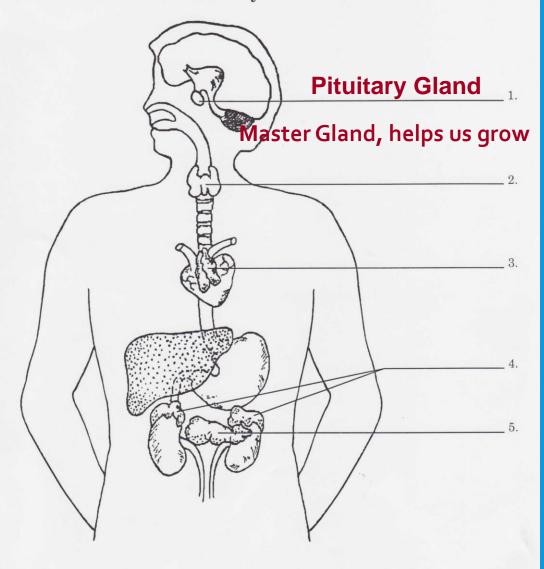
immunity – protection from getting certain diseases.

metabolism – the processing of food into energy in cells.

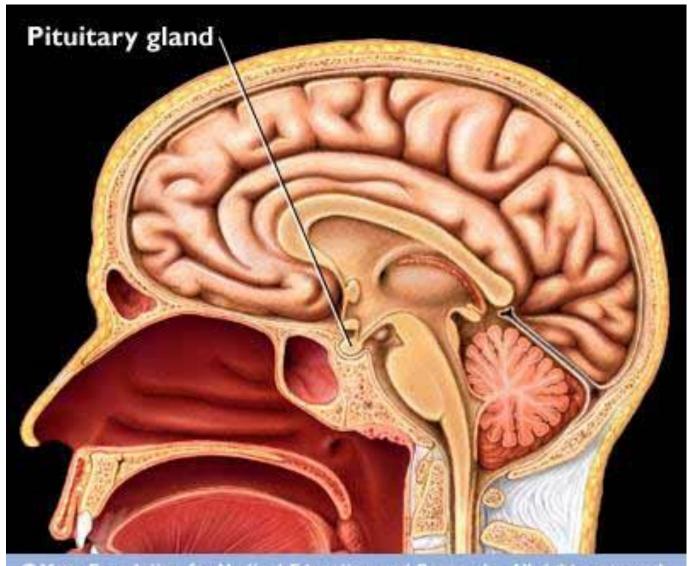
<u>pancreas</u> – located in the abdomen. It produces the hormone insulin which controls the rate at which the body uses sugar.

<u>pituitary gland</u> – located in the brain. It produces the growth hormone and hormones to control all of the other glands.

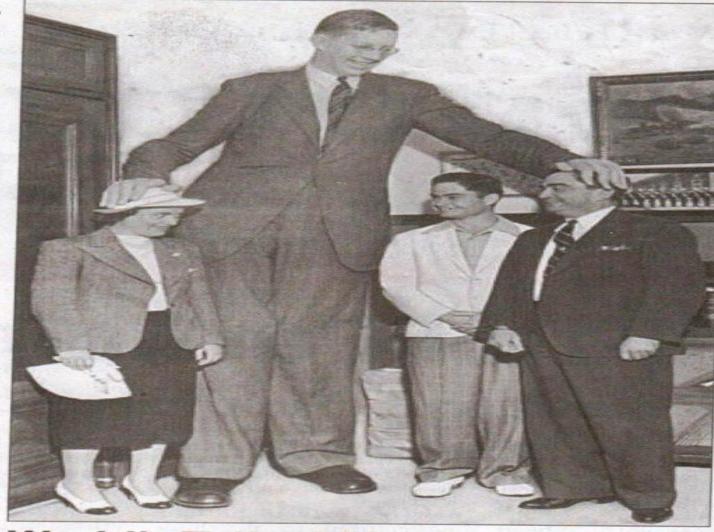
<u>thyroid gland</u> – the butterfly-shaped gland located in the neck. It produces the hormone thyroxin which controls the speed at which the food eaten is turned into energy and affects the body weight. <u>thymus gland</u> – located in the chest. It helps to build immunity during childhood.



adrenal glands pancreas pituitary gland

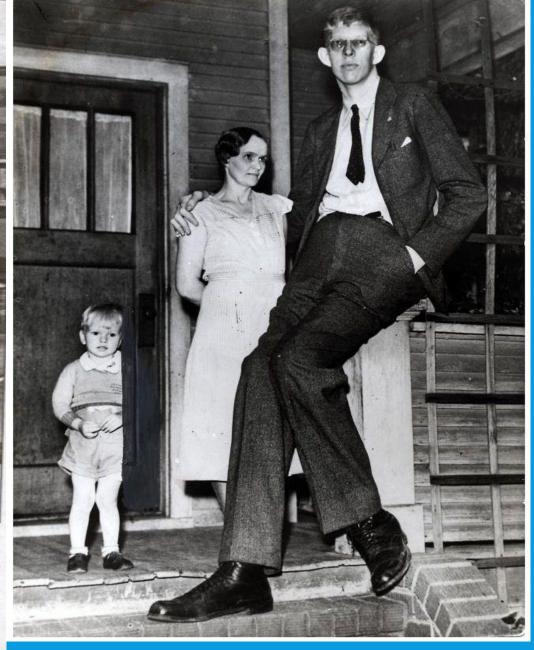


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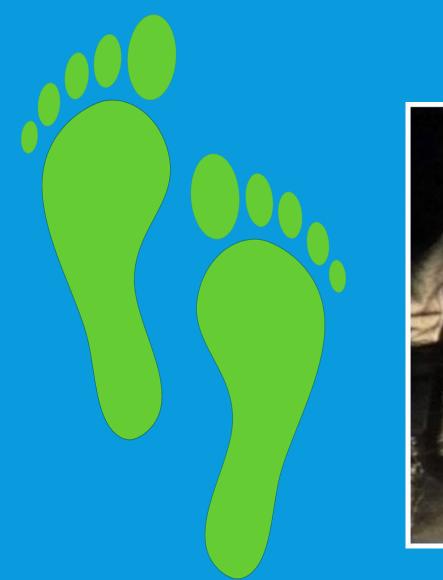


World's Tallest Man

Robert Wadlow, 1918-1940, grew to 8 feet, 11 inches tall, becoming the world's tallest recorded man. He was photographed many times with other individuals, which illustrated how tall he was. Dan Brannaon, who has written a book about Wadlow, will talk about his book at the Pacific Library May 8. There is limited space for the program, so visitors are urged to reserve a seat by calling 636-257-2712.



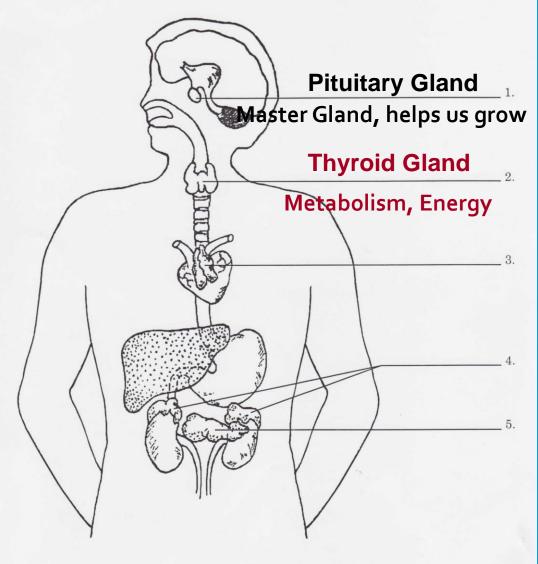
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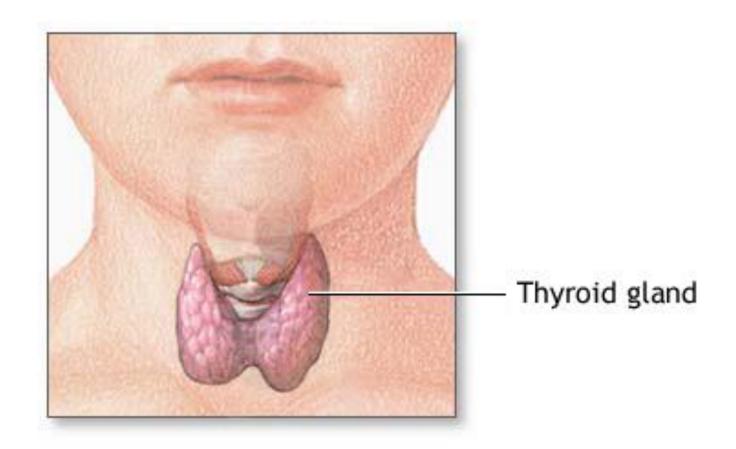




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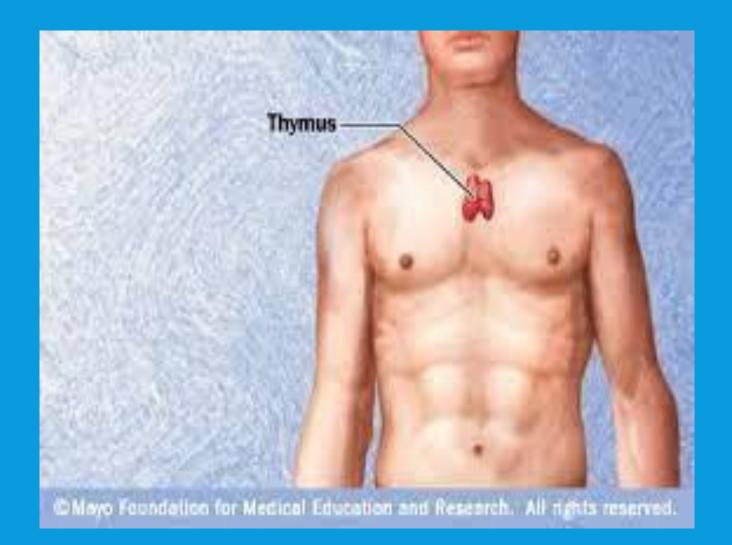
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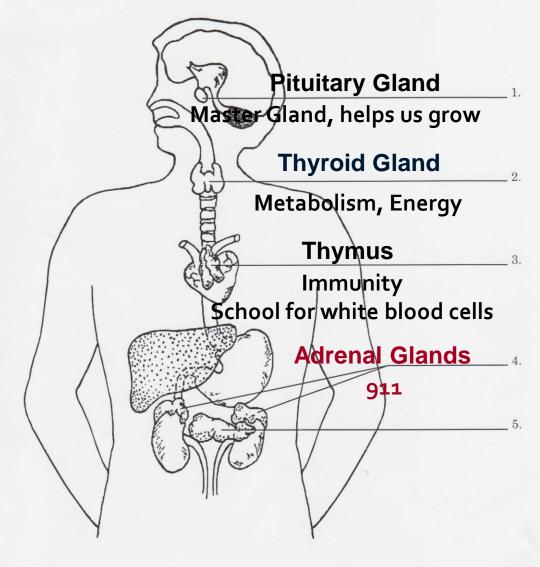




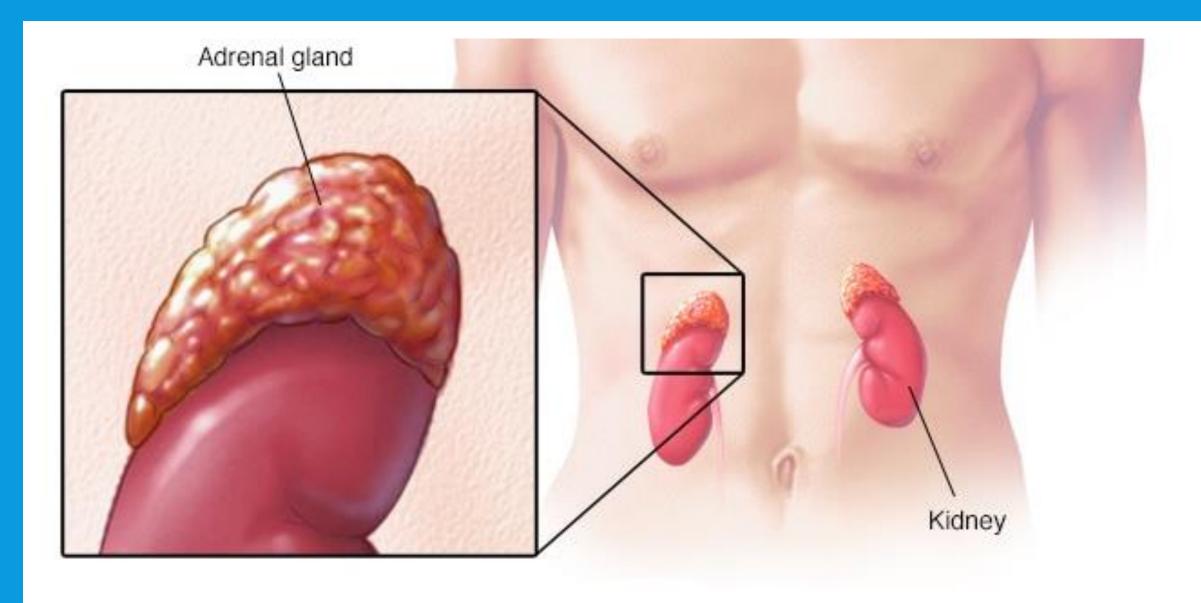
The Endocrine System **Pituitary Gland** Master Gland, helps us grow **Thyroid Gland** Metabolism, Energy Thymus Immunity School for white blood cells

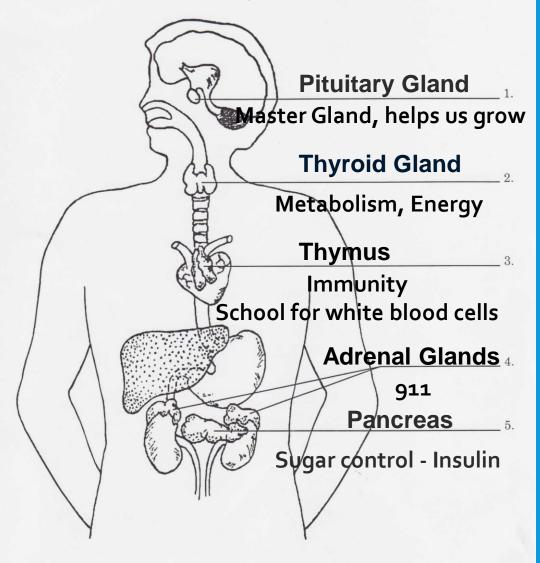
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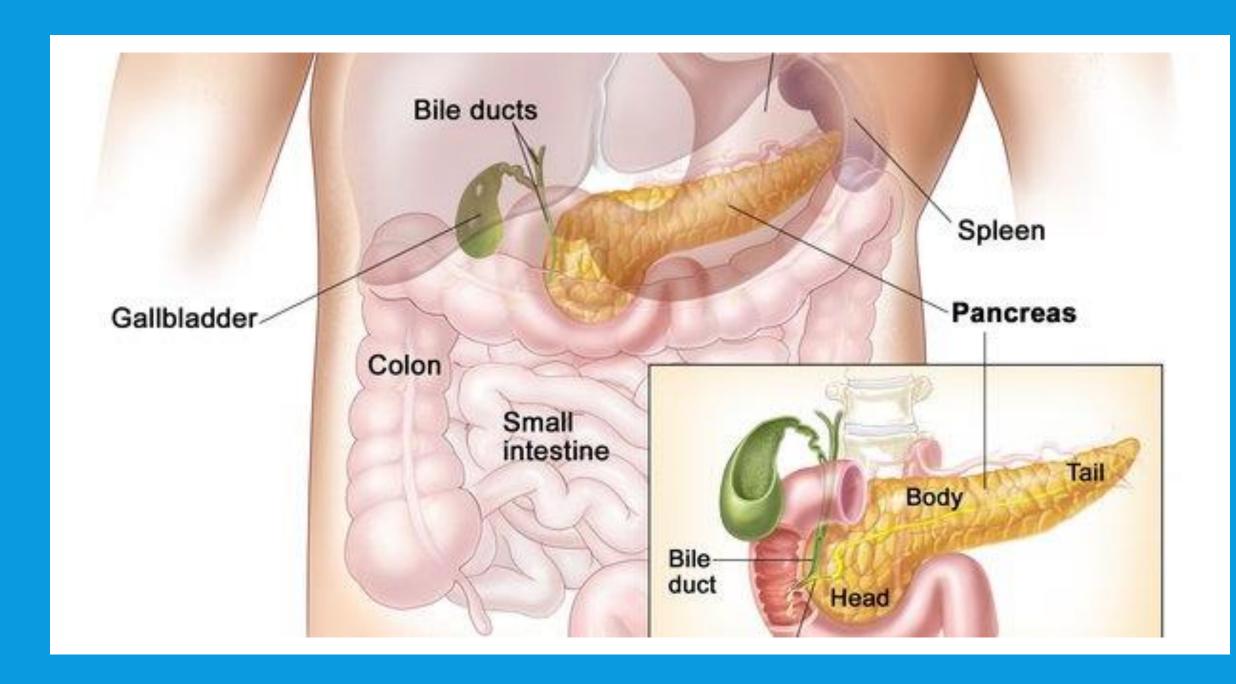


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Can You Answer The Questions Below?

What is the endocrine system?

The system that has chemical control of the body through the action of glands which produce hormones.

What are the names and function of three endocrine glands?

PITUITARY GLAND (master gland – growth), THYROID GLAND (metabolism), THYMUS GLAND (immunity), PANCREAS (sugar control), ADRENAL GLANDS (emergency action)

What are two effects of hormones on growth and development?

Rate of growth and metabolism

WHAT GLAND AM !?

- Billy's friend grew four inches over the summer and is now taller than he is because this gland, located deep inside the brain, released extra growth hormone. What gland am I?
- I'm a butterfly shaped gland located in the neck that releases a hormone that controls the rate at which food is turned into energy. What gland am I?
- Germs make us sick. This gland is located behind the heart and teaches white blood cells to tell the difference between cells that belong in the body and cells that don't (germs). What gland am I?
- Susie is excited and a little scared to ride the roller coaster. She starts to feel shaky and her heart is beating fast because these glands located on top of her kidneys released a hormone called Adrenaline. What gland am I?
- The new student in class has to check his blood sugar and wears a pump because this gland located in his stomach is not releasing Insulin. What gland am I?