

5th Grade Science Curriculum
Changes in Human Adolescence and The Reproductive System

Dear Parent of a TCCA Fifth Grade Student,

Animal and human reproduction is part of the fifth grade curriculum and Florida Standards. Due to the sensitivity of the topic, the information will be solely scientific-based, as simple as possible, and will not be tested on. Below is a general explanation of the principles that will be taught.

First, we will teach animal reproduction as well as identify the reproductive organs of humans, as science and emanating from the science curriculum. Since this is not a sex education class, the act of human reproduction will not be covered. Second, we will separate the boys and girls when we get to the subject of identifying human reproductive systems and their organs. Boys will learn about male/female reproductive organs, muscles, and bones from a male teacher, and girls will learn about female/male reproductive organs and the changes their bodies will make as they mature from a female teacher. Students are separated due to the sensitivity of the information and taught on a “need to know” basis. Additionally, students will receive further instruction on these topics in ninth grade biology. Third, though we will not encourage students to discuss these matters amongst themselves, we will emphasize the need for courtesy whenever one encounters topics related to reproduction and reproductive organs in the world. Fourth, in line with our first principle, our teaching of reproduction will not be a sex education course. Instead, we hope to provide a solid set of lessons in the science of reproduction that is appropriate to the children’s age and gender; we leave it to the parents to provide the moral instruction that may accompany these lessons and to augment our teaching as they see fit.

When the classes are separated (boys and girls), each class will have two adults in the room. Due to the limited number of male teachers at our school, the additional person accompanying our male teachers may be female and either an instructional coach or administrator.

Below you will find an outline of what will be addressed in the two day period.

A. Female Anatomy (Males and females - males taught by males, females taught by females)

- Diagram of female reproductive system
- ovaries - produce and release egg cells and estrogen
- fallopian tubes - site of fertilization, egg cells travel to uterus through these
- uterus - hollow, thick-walled organ that nourishes a fertilized egg, where the embryo/fetus develops
- cervix - bottom, cylindrical part of the uterus
- vagina - tube from cervix to body exterior, also called the birth canal

B. Male Anatomy (Males and females - males taught by males, females taught by females)

- urethra - pathway for urine and semen (sperm cells) to body exterior

- penis
- testes - where sperm cells are produced
- scrotum

C. Changes in Human Adolescence (**Females only**)

- What is puberty?
 - increase in hormone production - physical, mental and emotional changes
 - menstruation/periods
 - purpose - uterus and unfertilized egg are shed
 - age of onset and duration
 - PMS and symptoms

D. Changes in Human Adolescence (**Males only**)

- What is puberty?
 - increase in hormone production - physical, mental and emotional changes
 - changes in appetite, sleep, height and weight
 - voice change
 - acne, body odor/deodorant and hygiene

E. Reproduction of Animals - both external and internal (taught within the regular classroom, by your child's science teacher, with boys and girls present)

- fertilization - sperm cell and egg cell join in the fallopian tube
 - zygote - the fertilized egg travels down the fallopian tube and to the uterus
 - the zygote implants itself in the wall of the uterus
- growth and development
 - embryo (up to 8 weeks)
 - fetus (up to 40 weeks)
 - newborn

If you would like to preview the book that classes will be using, you can find it attached to this email. Only the first four chapters are used, as the rest of the unit is taught through the powerpoints.

If you would rather your child opt out of the human reproductive organs lesson, please let your child's teacher know in writing, through email, **by Friday, April 21st. *These students will miss the lessons, which are a part of the curriculum and Florida Standards, and be placed, for the science block, with another teacher. They will be given an assignment based on the science unit.*** Please note that by not explicitly notifying your child's teacher to opt out, your child is automatically opting IN to attend the lesson as described above. Should you have any questions, please contact your child's teacher by Friday at 3:00 p.m. Lessons will be taught Tuesday, April 25th and Wednesday, April 26th.

Sincerely,

Mrs. Pendleton - Principal