

1. Teaching children about sexual reproduction may be one of the hardest things to do. With the emphasis on "safe sex," sometimes the basic mechanics of sexual organs is overlooked. Explain the location and general reproductive functions of male reproductive organs (seminal vesicles, prostate, testes, penis) and female reproductive organs (ovaries, fallopian tubes, uterus, vagina).

My answer:

Seminal vesicles: produces seminal fluid | next to the prostate gland and bladder

prostate: produces seminal fluid | below the bladder

testes: creates sperm from seminiferous tubules | below the penis

penis: a long urethra that releases liquid waste and seminal fluid

ovaries: produces eggs | end of the fallopian tubes

fallopian tubes: two tubes that connect to an ovary | at the ends of the uterus

uterus: holds the fertilized egg and area of initial infant development | the other side of the vagina and cervix

vagina: where the sperm enters to go to the eggs | opposite end of uterus and cervix

Better answer:

2. Many people do not have a clear visual picture of where a fetus develops in a woman's body. Describe where the fetus is located and how that impacts the woman's organs in the pelvic region. You can use writing or upload your own labeled drawing.

My answer: The fetus is in the uterus. The uterus is at the end of the cervix that leads the sperm to the fallopian tubes. There is an expansion of skin, uterus enlargement for the growth of the fetus, a placenta is created to give nutrients to the fetus, rectum is pushed and the bladder is pushed in between the pubic bone and the uterus making a woman go to the bathroom more.

Better answer:

3. List four organs impacted by puberty, and include brief information on changes that occur to that organ.

My answer:

Males:

- Increase in testosterone and viable sperm
- Cells go through stages to produce viable sperm
 - Meiosis to increase cell count
 - Altering the amount of genetic information so there's just enough to combine with the genetic information of the egg
- Doubling in size of the prostate
 - Seminal fluid: fluid that makes up part of the semen | comes from seminiferous vesicles and prostate
- changes in voice, usually deeper in pitch

Females:

- Egg provides all organelles and nutrients that a cell needs to fertilize
- Ovaries capable of bringing eggs to maturation with the presence of hormones at just the right ratio. Fluctuations of hormones that make it possible for an egg to fully mature
- Active lobules that are producing milk

General

- hormonal changes at puberty trigger a growth spurt
- redistribution of fat
- increased metabolism
- increased oil gland activity

4. Aging past puberty impacts organ structures and functions in different ways. Select three body structures and describe the changes that occur to these organs as we age.

My answer:

- Changes in hair color: Melanocytes overtime produce less melanin and colorless air bubbles accumulate
- Changes in skin color: As some cells produce less melanin, other melanocytes get larger which ends up producing age spots
- Drier skin, hair, and nails: Reduced oil production from sebaceous glands

- Wrinkles: reduction of collagen from fibroblasts, elastic fibers and fat
- Cataracts: cloudy lens that reduces the amount of light passing through
 - Macular degeneration: the inner lining of eye retina can degenerate over time
- Cochlear degeneration: brain still makes up that there is information coming in and causes sounds that aren't there
- Fewer ciliated receptor cells: drop-in smell results in loss of taste
- Decreased bone density
- Weaker heart muscle
- Decreased organ efficiency
 - Liver: decrease bile producing and less filtering of nutrients
 - Kidneys: less filtering of blood plasma