

4.1 Male Reproductive System

The male reproductive system is designed with two purposes in mind:

-produce _____

-deliver _____ to the _____

Both males and females have _____ (first) sexual

characteristics and _____ (second) sexual

characteristics. _____ characteristics have been

there since birth while _____ characteristics show up after puberty.

_____ : the period of development in a human where they become sexually mature and able to reproduce.

In males this usually starts at age _____ and continues until about age 18

The main male sex hormone is called _____. At puberty, the _____ gland releases hormones that signal the _____ to produce more _____.

_____ sex characteristics: have a direct role in reproduction. These are the organs that create sperm and deliver them to the egg. Ex: _____,

_____, _____, _____,

_____, _____, _____,

and _____.

_____ sex characteristics: help distinguish male from female, but no direct role in reproduction. Ex:

_____, appearance of _____,

_____ and _____.

A sperm is very simple. It has three main parts:

a _____, a _____ and

a _____. It is designed to move.

The _____ contains the nucleus which is where the

DNA is located. Human sperm contains _____ chromosomes.

The only other part of the head other than the nucleus is called

the _____. It contains chemicals necessary to allow the sperm to enter the egg.

The _____ is just behind the head and is packed

with _____. This is necessary to power the sperm for its swim.

The tail is called a _____ and whips back and forth to propel the sperm forward.

Male Reproductive Structures:

_____: Two _____ hang outside the abdominal cavity. It is here that sperm are produced and

nourished. It is also where male _____ is produced.

_____: a protective sac that holds the

_____. It also helps to keep the testes at the optimal

temperature for_____.

_____: Each testis contains a mass of coiled

tubes called_____. These tubes contain diploid cells that undergo meiosis to produce haploid sperm cells.

_____: These structures are just _____ the testis. This is where the mature sperm are stored.

To get out of the male reproductive structure, sperm need to travel through_____. The first tube leads from the

_____ and is called the_____.

The second leads from the _____ though the

_____ and out the penis and is called the

_____. The _____ is also the same tube urine exits through. The sperm are pushed out of the

_____ by muscular contractions of the penis.

Sperm need a fluid to swim in as well as a source of

_____. The seminal fluid is created by a mixture of

secretions from various glands such as the_____,

_____, and_____. This fluid has

_____ in it as an energy supply for the sperm. It is also slightly _____ to protect against the _____ environment of the female reproductive tract. The sperm and seminal fluid together are called _____.

Sperm develop in the _____ starting at the outer edge of tube. As they mature into sperm they move closer and closer to the inner hollow opening. From there they move to the _____ where they finish maturing.

It can take a sperm cell _____ days to mature, but healthy male reproductive systems can make _____ mature sperm a day. It only takes 1 sperm to fertilize an egg, but millions are needed because it is a very dangerous trip!

If sperm are not released within a few days they are destroyed by _____, however, new sperm cells are always being created. Mature sperm can be created even into old age, however the rate at which they are made slows as the male gets older.