

**HOMEWORK 1**      *Due at the start of the class band on Wednesday, January 29, 2020 (for H & J Bands)  
or Thursday, January 30, 2020 (for D Band).*

- A. Carefully read the course policies and sign the contract.
- B. Have a parent/guardian carefully read the course policies and sign the contract.
- C. Be prepared with all required materials every day: both pen and pencil, three-ring binder with loose leaf, calculator, and pocket folder.

**HOMEWORK 2**      *Due at the start of the class band on Friday, January 31, 2020.*

- A. Visit the course webpage: go to <http://www.spraguescience.com>, click the tab for “Living Environment” on the top of the screen, and read through the following sections with a parent/guardian.
  - Frequently Asked Questions
  - Good Advice from Former Students
  - How to Succeed in this Class

**Note: Students who do *not* have internet access at home may use the library computers in room 224 during OPTA or make an appointment with Mr. Sprague to use the computers in room 403 after school.**

- B. Write a letter to your teachers reflecting on your progress in Living Environment last semester and how you plan to make this new semester as successful as possible. Be sure to address each of the following:
  - state the final grade you received for Semester I of Living Environment
  - describe what you were most proud of yourself for in Living Environment I
  - describe what you will do this semester to ensure that improve your exam grades
  - explain exactly how to make up a lab if you are ever absent on a lab day

**HOMEWORK 3**      *Due at the start of the class band on Wednesday, February 5, 2020 (for H Band)  
or Thursday, February 6, 2020 (for D & J Bands).*

The username for the BrainPOP video is \_\_\_\_\_ and password is \_\_\_\_\_.

- A. Watch the following online video: “BrainPOP: Growth” (see your teachers for password)  
<https://www.brainpop.com/health/geneticsgrowthanddevelopment/growth>
- B. Watch the following online video: “BrainPOP: Cancer” (see your teachers for password)  
<https://www.brainpop.com/health/diseasesinjuriesandconditions/cancer>
- C. Read Miller & Levine (textbook) pp. 234–237 and pp. 239–247 and answer the following questions in **complete sentences** on a **separate sheet of paper**. You may type or neatly handwrite your answers.
  1. Reproduction is one of the eight life functions that define living things. Explain why reproduction is considered a life function even though an organism can survive without reproducing.
  2. Humans reproduce sexually, but we could not live without our individual cells reproducing asexually by cell division. Explain why asexual reproduction within our own bodies is necessary for survival.
  3. Describe how cancer cells act different than normal, healthy cells.

**HOMEWORK 4**

This assignment is due at the start of the class band on \_\_\_\_\_.

The username for the BrainPOP video is \_\_\_\_\_ and password is \_\_\_\_\_.

- A. Watch the following online video: “BrainPOP: Mitosis” (see your teachers for password)  
<https://www.brainpop.com/science/cellularlifeandgenetics/mitosis>
- B. Read Miller & Levine (textbook) p. 239 and study the diagram on p. 278. Answer the following questions in **complete sentences** on a **separate sheet of paper**. You may type or neatly handwrite your answers.
1. Explain the differences between mitosis and meiosis. In your answer, be sure to:
    - state *one* reason why a cell in your body would perform mitosis
    - state *two* places in your body where cells would perform mitosis
    - state *one* reason why a cell in your body would perform meiosis
    - state *one* place in your body where cells would perform meiosis
  2. The wing cells of a male fruit fly contain 8 chromosomes. State how many chromosomes would be found in:
    - the daughter cell of the wing cell after performs mitotic division
    - the eye cell of the fruit fly
    - the sperm cell of the fruit fly

**HOMEWORK 5**

This assignment is due at the start of the class band on \_\_\_\_\_.

- A. Watch the following online video: “BrainPOP: Reproductive Systems” (see your teachers for password)  
<https://www.brainpop.com/health/bodysystems/reproductivesystem>
- B. Read Miller & Levine (textbook) pp. 817–818 and complete the Male Reproductive System worksheet. The job of each organ can be found in the textbook or online. Please make arrangements to obtain any necessary information before the due date.

***\*\*Full credit will only be awarded if every blank box on the worksheet is completed.\*\****

**HOMEWORK 6**

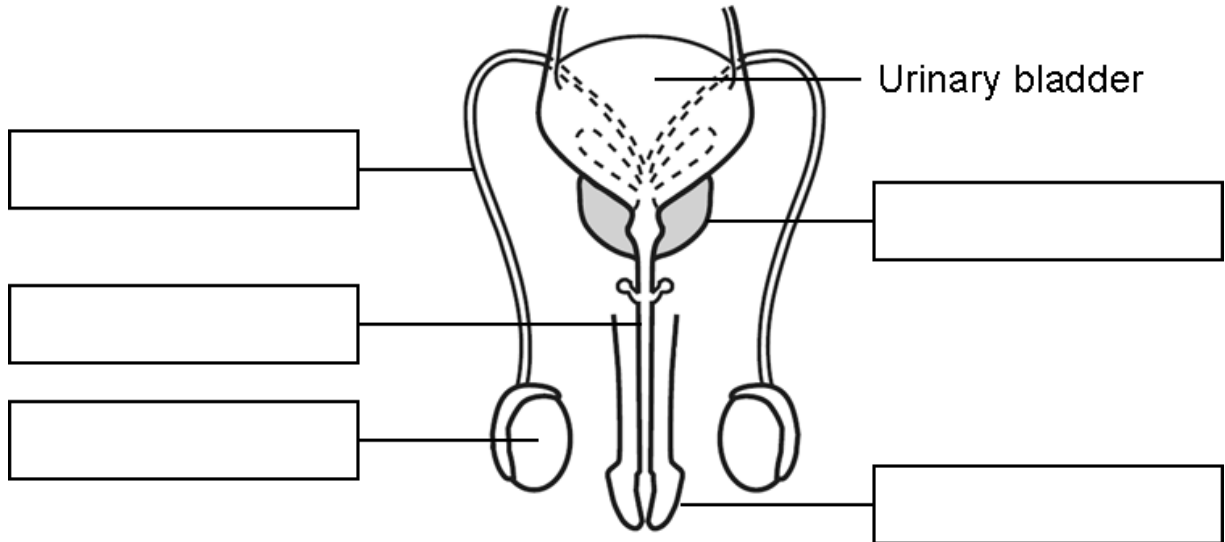
This assignment is due at the start of the class band on \_\_\_\_\_.

- A. Watch the following online video: “BrainPOP: Period” (see your teachers for password)  
<https://www.brainpop.com/health/personalhealth/period>
- B. Read Miller & Levine (textbook) pp. 819–822 and complete the Female Reproductive System worksheet. The job of each organ can be found in the textbook or online. Please make arrangements to obtain any necessary information before the due date.

***\*\*Full credit will only be awarded if every blank box on the worksheet is completed.\*\****

### MALE REPRODUCTIVE SYSTEM

Label the *testis*, *vas deferens*, *prostate gland*, *urethra*, and *penis* in the diagram below.  
 You should refer to page 818 in the Miller & Levine textbook.



Identify the function of each of the structures in the human male reproductive system listed below.  
 You should refer to page 818 in the Miller & Levine textbook.

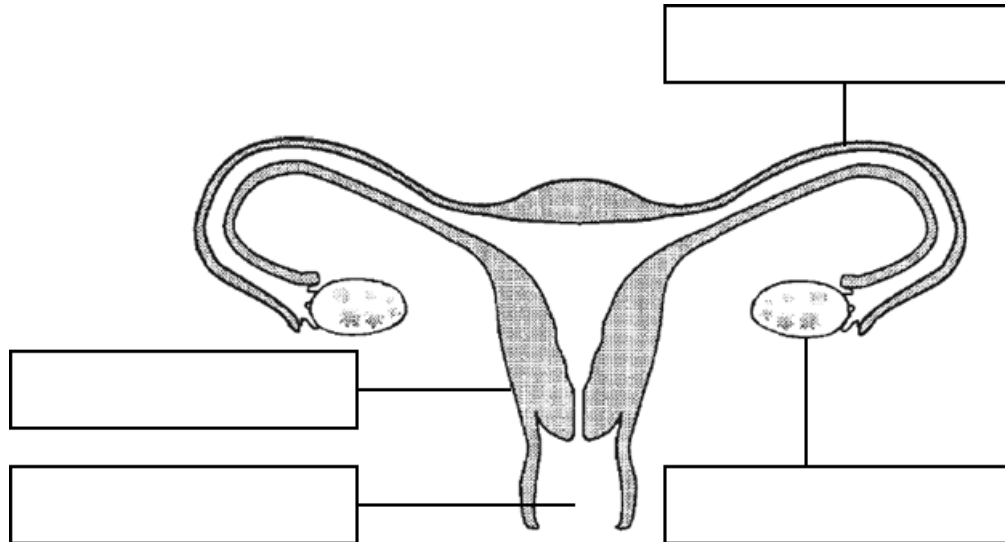
Structure	Function
Testes	
Vas deferens	
Prostate gland	
Urethra	
Penis	

Identify the male hormone and describe its function. Refer to page 817 in Miller & Levine.

Hormone	Function
Testosterone	

### FEMALE REPRODUCTIVE SYSTEM

Label the *ovary*, *oviduct* (Fallopian tube), *uterus*, and *vagina* (birth canal) in the diagram below. You should refer to page 819 in the Miller & Levine textbook.



Identify the function of each of the structures in the human female reproductive system listed below. You should refer to pages 819 through 822 in the Miller & Levine textbook.

Structure	Function
Ovaries	
Oviducts (Fallopian tubes)	
Uterus	
Vagina (birth canal)	

Identify the two female hormones and describe their functions. Refer to pages 817 and 821 in Miller & Levine.

Hormone	Function
Estrogen	
Progesterone	