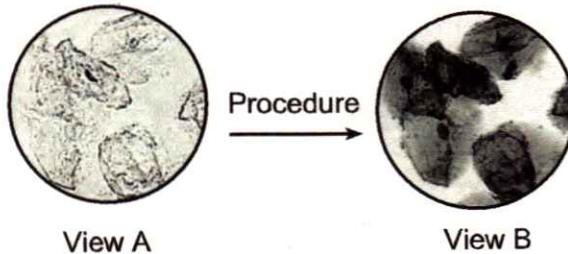


Name: _____

Do Now 3B
6 points

1. Two views through a compound light microscope of a wet-mount slide preparation of cells are shown in the photographs below.



Which procedure was most likely followed to obtain view B? [1]

Base your answers to questions 77 and 78 on the information below and on your knowledge of biology.

Three students took their pulse rates in beats per minute (bpm) while sitting in class. The results are shown in the data table below.

Pulse Rates of Three Students

Student	Pulse Rate (bpm)
1	73
2	85
3	67

2. State *one* reason why the pulse rates were *not* the same for all three students, even though they were all resting at the time. [1]
- _____
- _____

3. What is the average pulse rate, in bpm, for this group of students? [1]

_____ bpm

Base your answers to questions 4 through 6 on the information below and on your knowledge of biology.

Ticks, such as deer ticks and dog ticks, feed on the blood of humans and other animals. Part of the feeding process involves the tick injecting its saliva to help make blood flow. In the process, they sometimes spread disease organisms to their host. Sometimes ticks get on clothing, and can remain there for a few days before actually biting their host.

A scientist found that ticks might be able to survive even when exposed to hot water and detergent in a washing machine.

Students designed the experiment below to test how well ticks survive a hot-water washing machine cycle with detergent. Note that some details of the design are incorrect.

Hypothesis: Can ticks survive a hot water and detergent wash cycle in a washing machine?	
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Data to be Collected:	Number of ticks surviving the cold-water wash cycle
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	Control Group	Experimental Group
Test Subjects:	deer tick	dog tick
Experimental Setup:	ticks in washing cycle with cold water and detergent	ticks in washing cycle with hot water and detergent
Number Used:	10	100

4. Identify *one* error with the hypothesis. [1]

5. Explain why the students' proposed data to be collected would not likely test what the students intended. [1]

6. Identify *one* error in the students' design in the shaded area of the table and explain how the students should change the experiment to correct the error. [1]

Error: _____

Correction: _____

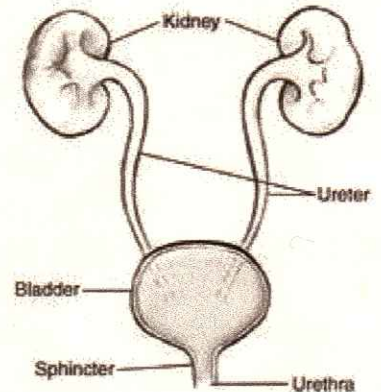
Name: _____

The Excretory System

By Brandi Waters

Activity 3B
10 points

1 Inside your body are many harmful chemicals. Many of them are made inside your body. Your body is made of living cells. The cells need energy to live. They get energy from the foods that you eat. Sugars, fats, and proteins can all be turned into energy for the cells to use. The cell breaks them down into small pieces, but not every piece can be used. The process of making energy also makes other chemicals that your body cannot use. The chemicals that are left over from or created during this process can be harmful if there are too many of them in your body. Your body gets rid of these harmful chemicals through the excretory system.



2 The excretory system is your body's way of removing harmful waste from your blood. It is made up of your lungs, your kidneys, and your skin. Each of these organs removes a different kind of waste from your body. Your lungs remove harmful gases. Carbon dioxide is a waste gas that is made when your cells make energy. The carbon dioxide is carried by your blood to your lungs. In your lungs, carbon dioxide is released from your blood. Oxygen takes its place. Carbon dioxide is removed from your lungs every time you exhale.

3 Your kidneys filter liquid waste out of your blood. Their most important job is to remove a chemical called urea from your blood. Urea can be quite harmful to your body. It is made when your body breaks down protein from meat, beans, nuts, and other foods. The kidneys remove unwanted water, minerals, and urea from your blood. It forms a liquid called urine that is stored in your bladder before it is removed from your body. The final organ in the excretory system is your skin. It removes dead cells, salt, and unused water from your body through sweating.

Name _____

Date _____

The Excretory System

1. _____ is a part of the excretory system. <input type="radio"/> A The liver <input type="radio"/> B The lungs <input type="radio"/> C The blood <input type="radio"/> D All of the above	2. What are many of the harmful chemicals in your body created by? _____ _____
3. Your lungs remove _____ from your blood. <input type="radio"/> A Carbon dioxide <input type="radio"/> B Urea <input type="radio"/> C Oxygen <input type="radio"/> D Salt	4. Your _____ filter(s) liquid waste from your blood. <input type="radio"/> A Skin <input type="radio"/> B Bladder <input type="radio"/> C Liver <input type="radio"/> D Kidneys
5. What process creates urea? _____ _____	6. How is urea made? _____ _____

7. How can your kidneys maintain homeostasis? (2 points)

8. People often sweat more when they are exercising. One reason is because sweating helps us to stay cool. What is another reason why people might sweat more when they exercise? Explain your reasoning. (2 points)