

8th Grade, Lewis County Middle School NTI Day 12

Contents:

- Language Arts
- Math
- Science
- Social Studies

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Argumentative Writing Practice 2 - Day 12 - 100 points

Developing Points/Reasons - List what each letter in SMARTIES stands for.

Letter	What it stands for
S	
M	
A	
R	
T2	
I	
E	
S	

Map it Out Before Writing

S M A R T I E S - Refer to the prompt you analyzed using SPAT yesterday. Develop 4 reasons to support the side you choose.

Pick a side (and stick to it!). Highlight: I am FOR/AGAINST using computerized reading programs in your school.

	Strategy	Strategy	Strategy
Point or Reason Computerized reading programs increase students' reading ability because they read more.	Anecdote - After being introduced to the Hunger Games through Accelerated Reader, I began to read other futuristic books.	Math - As a result, my reading grades went up 10 percent on my next report card.	Anecdote - My friends and I even started a competition over who could read the most books.
Point or Reason			
Point or Reason			
Point or Reason			

Writing Numbers in Scientific Notation

► Write each number in scientific notation.

1 8

2 54

3 0.02

4 229

5 187

6 0.452

7 0.006009

8 452

9 35,710

10 0.00005026

11 787,000

12 45.2

13 $934\frac{1}{2}$

14 0.000000452

15 11,235,000,000

$$\begin{array}{r} 7 \\ 7.0 \\ 7 \times 10^0 \end{array}$$

$$\begin{array}{r} 243 \\ \underline{243} \\ 2.43 \times 10^2 \end{array}$$

$$\begin{array}{r} 8,200,000. \\ \underline{8,200,000.} \\ 8.2 \times 10^6 \end{array}$$

$$\begin{array}{r} 0.382 \\ \underline{0.382} \\ 3.82 \times 10^{-1} \end{array}$$

$$\begin{array}{r} 0.0000079 \\ \underline{0.0000079} \\ 7.9 \times 10^{-6} \end{array}$$

Remember, the mantissa should be between 1 and 10 or equal to 1.

The exponent will be the number of places the decimal point moves.

Maynard/Robinette: DAY 12

Cash crops made slavery a big part of America's early economy

With their farms and plantations, America's southern states became an economic engine of the early United States. Their fuel of choice for this engine was human slavery.

The slave economy was central to American wealth. By the 1860s, the South was producing 75 percent of the world's cotton, thanks to slave labor. There were more millionaires per capita in the Mississippi River valley than anywhere in the nation. Enslaved African-Americans represented Southern planters' most significant investment, and most of their wealth. However, it also led to the most destructive war in U.S. history— the Civil War.

Seeking New Sources Of Labor

Building a new empire in North America required labor and lots of it. For much of the 1600s, the American colonies operated as agricultural economies, driven largely by indentured servitude. Most workers were poor, unemployed laborers from Europe who, like others, had traveled to North America for a new life. In exchange for their work, they received food and shelter, sometimes learned a trade, and eventually earned their freedom.

By 1680, the economy in Great Britain improved and more jobs became available there. As the number of European laborers coming to the colonies shrank, big planters viewed African labor as an economic necessity. The idea of slavery became more widely acceptable.

With ideal climate and available land, property owners in the southern colonies began establishing plantation farms for cash crops like rice, tobacco and sugar cane. These enterprises required increasing amounts of labor. To meet the demand, wealthy planters turned to slave traders, who imported even more kidnapped Africans to the colonies, the majority from West Africa. More Africans were imported and had children, thereby increasing this human "inventory." A new industry was born: the slave auction, where humans were inspected like animals and sold to the highest bidder.

In the 17th century, an enslaved person in the American colonies cost between five and 10 dollars. By the mid-19th century in the United States, the average price for a healthy male or female slave rose to between \$1,200 to \$1,500.

Ignoring The Idea That All Men Were Created Equal

Slave labor became so important to the Southern economy that nothing — not even the stated ideal that all men were created equal — would dislodge it. When delegates to the Constitutional Convention met in Philadelphia in the summer of 1787, they were split on the moral question of human bondage and its cruelties, but not on its economic demand. At the time, there were nearly 700,000 enslaved black people living in the United States.

When the topic of slavery arose during the deliberations over political representation in Congress, the southern states of Georgia and the Carolinas demanded that each black slave be counted along with whites. The higher the population in a state, the more representation it received. Northern states protested, saying it gave southern states an unfair and unethical advantage. Their compromise? Delegates decided that each slave would count as three-fifths of a person, giving the South more representation. They also agreed that the slave trade— but not slavery itself — could be banned 20 years hence, in 1807. It was a concession to Northern states that had abolished slavery several years earlier.

King Cotton Emerges In The South

By the beginning of the 1800s, a new cash crop showed promise: cotton. Its production would increase slaveholders' dependence upon slavery and accelerate the slide toward conflict.

Picking and cleaning cotton involved a labor-intensive process that slowed production and limited supply. In 1794, inventor Eli Whitney devised a machine, the cotton gin, that combed the cotton bolls free of their seeds very quickly. Manually, one slave could pick the seeds out of 10 pounds of cotton in a day. The cotton gin could process 100 pounds in the same time.

Many people believed the cotton gin would reduce the demand for slaves because the machine could replace human labor. But in reality, the accelerated processing capacity increased the demand for cotton. The more cotton that was grown, the more that could be shipped to the mills of Great Britain and New England. The invention of the cotton gin also coincided with other developments that opened up large-scale global trade, namely larger cargo ships and steam-powered factories.

Cotton Production Drove The U.S. Economy

With all these factors amping up production and distribution, the South was poised to expand its cotton-based economy. With more land needed for cultivation, the number of plantations expanded in the South and moved west into new territory. Production exploded: Between 1801 and 1835 alone, the U.S. cotton exports grew from 100,000 bales to more than a million, comprising half of all U.S. exports. As cotton became the backbone of the Southern economy, the free labor of slavery delivered impressive profits. These profits benefited industries beyond the South, including manufacturing, banking and shipping in Northern cities.

Steadily, a near-feudal society emerged in the South. At the top was the aristocratic landowning elite who wielded most of the economic and political power. Their plantations spanned upward of a thousand acres, controlling hundreds — and, in some cases, thousands — of enslaved black people.

Below the elite class were the small planters who owned a handful of slaves. Farther down were slaveless small farmers. Landless whites were at the bottom, making up three-quarters of the white population — and dreaming of the day when they, too, might own slaves. Laboring at the bottom were some 4 million enslaved black people. For southern whites, the economic advantages of maintaining slavery outweighed any moral doubts about its injustice and cruelty.

The Abolitionist Movement Shifted The Balance

By the start of the 19th century, slavery and cotton had become critical sectors in the U.S. economy. However, by 1820, political and economic pressure from Northern interests placed a wedge between the two regions. The abolitionist movement, which called for an elimination of the institution of slavery, gained influence in Congress. Tariff taxes were passed to help Northern businesses fend off foreign competition while also hurting Southern consumers.

Meanwhile, slave interests were determined to expand slavery into newly forming states in the Midwest and West, a plan intensely opposed by anti-slavery groups. By the 1850s, many Southerners believed secession from the Union was their only option.

When considering leaving the Union, Southerners knew the North had an overwhelming advantage in population, industrial output and wealth. Still, many were eager to forge a future separate from what they saw as political and economic interference from Northern interests. As one state after another left the Union in 1860 and 1861, many Southerners believed they were doing the only thing they could to preserve their economy and their way of life, one based on slavery.

Answer the following and return to either Mr. Maynard or Mr. Robinette:

Day 12

1. Read the following selection from the section "Ignoring The Idea That All Men Were Created Equal?"

Northern states protested, saying it gave southern states an unfair and unethical advantage. Their compromise? Delegates decided that each slave would count as three-fifths of a person, giving the South more representation. They also agreed that the slave trade – but not slavery itself – could be banned 20 years hence, in 1807. It was a concession to Northern states that had abolished slavery several years earlier.

Which of the following words from the selection provides a context clue to the meaning of the word "concession"

- a. unethical
 - b. compromise
 - c. representation
 - d. abolished
2. Read the following sentence from the section "Cotton Production Drove The U.S. Economy"?

As cotton became the backbone of the Southern economy, the free labor of slavery delivered impressive profits

The author uses the word "backbone" to mean ____.

- a. Moral courage
 - b. Central support
 - c. Slender column
 - d. Bending structure
3. Read the following paragraph from the section "Seeking New Sources Of Labor."

With ideal climate and available land, property owners in the southern colonies began establishing plantation farms for cash crops like rice, tobacco and sugar cane. These enterprises required increasing amounts of labor. To meet the demand, wealthy planters turned to slave traders, who imported even more kidnapped Africans to the colonies, the majority from West Africa. More Africans were imported and had children, thereby increasing this human "inventory." A new industry was born: the slave auction, where humans were inspected like animals and sold to the highest bidder.

What is the MAIN reason the author includes this paragraph in the article?

- a. to list the cash crops that were grown using slave labor
- b. to introduce the positive qualities of the South's climate and land
- c. to contrast the conditions of slaves with indentured servants
- d. to elaborate on causes and growth of the slave-based economy

2.2 How Living Things are Organized

You have learned that a *system* is a group of factors that are related in some way. You can think of an individual organism as a *living system*. What variables affect you as a system? An obvious answer is the temperature around you (Figure 2.5). The type of food you eat is another variable. Your body responds to different variables in different ways. In this section, you will learn about how living systems are organized and the variables that affect them.

The organization of living systems

Living systems are organized

Is your room disorganized? Even if it is, you are not! As a living system, your body is organized to use matter and energy to move, grow, and survive. Living systems—like you—contain many levels of organization. These are described on the next few pages.

Molecules

A *molecule* is a basic unit of matter. Living systems are made of many different molecules. Each type of molecule has an important function. Your body contains molecules that store energy, control life functions, and even hold all of the information needed to make another you! You'll learn more about molecules in Chapter 4.

Cells

A cell is the basic unit of a living system. Each cell is made up of different types of molecules including proteins, carbohydrates, and others. Your body contains trillions of cells, each one a living system on its own. Some organisms are made up of only one cell. Figure 2.6 shows what a one-celled organism called a *Euglena* looks like. Organisms that are made of more than one cell are called *multicellular* organisms. You'll learn much more about cells in Unit 3.

A cell is the basic unit of a living system.

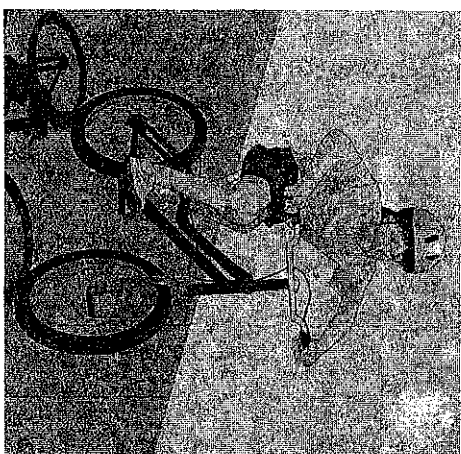


Figure 2.5: A living system is affected by outside variables. What are the variables affecting the girl in the picture?

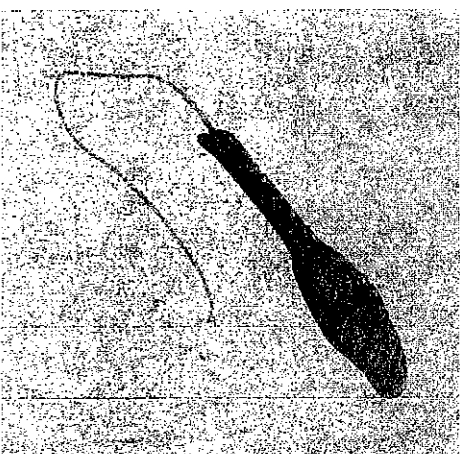


Figure 2.6: A *Euglena* is a one-celled organism.

Tissues

Your body is made up of many different types of cells. You have skin cells, muscle cells, liver cells, nerve cells, and blood cells, to name just a few. A group of specialized cells that performs a particular function is called a **tissue**. For example, muscle tissue is a tissue that is able to contract. Figure 2.7 shows what your muscle tissue looks like under a microscope.

Organs

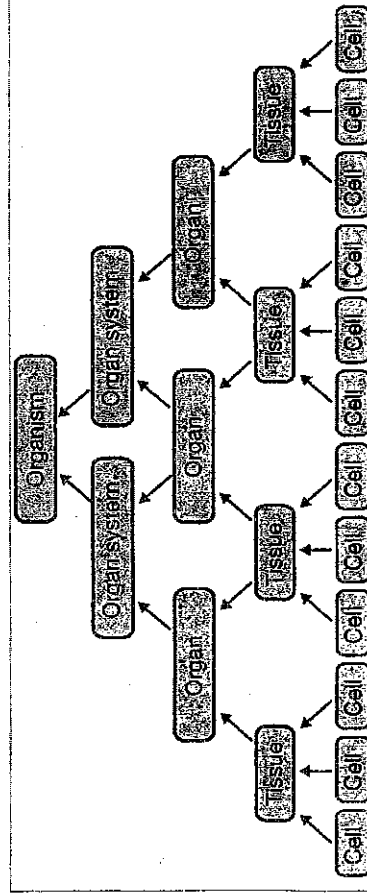
Tissues combine to form organs, the next level of organization. An **organ** is a group of tissues that works together to carry out a set of functions. For example, your stomach is an organ that contains several types of tissue. Muscle tissue in your stomach contracts to mix food. Another type of tissue makes a chemical that breaks down the food.

Organ systems

A group of organs that works together to perform a set of functions is called an **organ system**. For example, your digestive system consists of many organs including the esophagus, stomach, small intestine, and large intestine. Each organ in the system performs a different function that is part of the digestive process.

Organism

In multicellular organisms like you, different body parts and organ systems take on different functions. The network of organ systems works together to keep the organism alive. An **organism** is an **independently functioning living thing**.



a VOCABULARY

tissue - a group of specialized cells that performs a particular function

organ - a group of tissues that works together to carry out a set of functions.

organ system - a group of organs that works together to perform a set of functions.

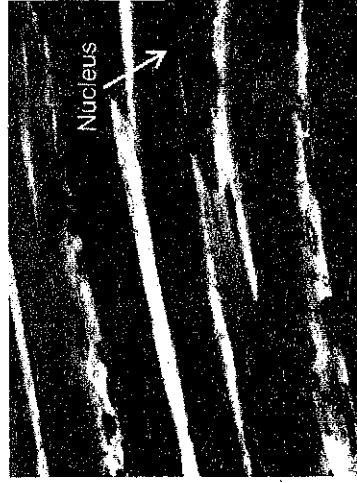
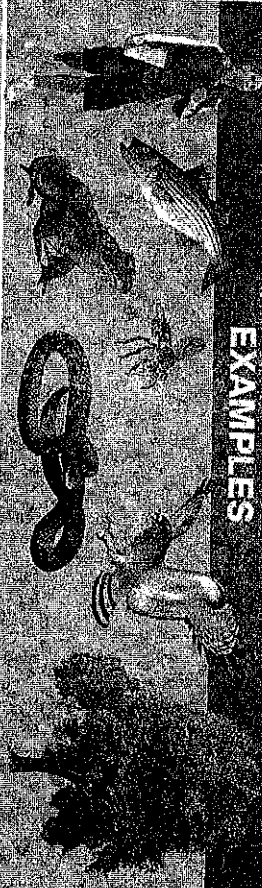
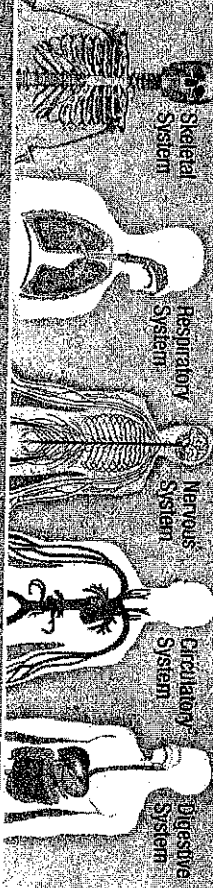
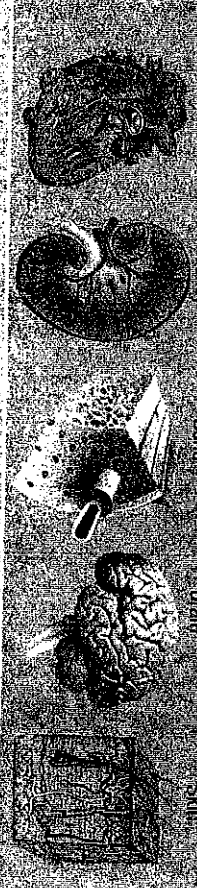
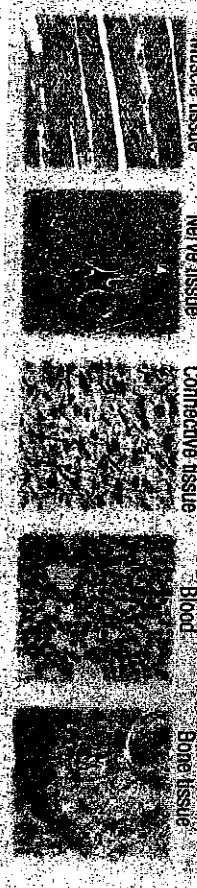
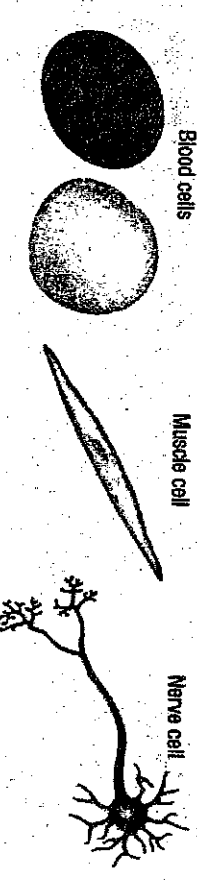


Figure 2.7: Muscle tissue is made of individual muscle cells. Each individual cell has a dark spot called a nucleus.

Five levels of organization in multicellular organisms

LEVEL	DEFINITION	EXAMPLES
5 Organism	An independently functioning living thing	
4 Organ Systems	A group of organs that work together to perform a set of functions	
3 Organs	A group of tissues that work together to carry out a set of functions	
2 Tissues	A group of specialized cells that perform a particular function	
1 Cells	The basic unit of structure and function in living things	

Variables and living systems

Homeostasis

Living things can respond to changes in their surroundings to maintain a steady internal environment. The process of maintaining a life-supporting system is called **homeostasis**. Homeostasis happens at all levels of organization, including the cellular level, and is a characteristic of all living things.

Variables that affect life

All sorts of variables affect an organism's ability to stay alive. These include temperature, food, water, and the level of oxygen (Figure 2.8). All organisms have built-in processes to help them survive when variables change. Organisms can survive within a range of values for each variable. If a change in a variable is too severe, the organism may not be able to maintain homeostasis and could die.

Why do we sweat and shiver?

You experience homeostasis every day, as you'll see in the following story. It was a hot day so Sarah decided to go for a swim in the neighborhood pool. She packed a towel and headed out on her bicycle. As Sarah climbed up a hill, she began to drip with sweat. She couldn't wait to jump into the pool! When she started to swim though, the water was so cold she couldn't stay in very long. Once Sarah got out of the water, she started shivering. The shivering stopped once she felt warm again.

Sweating and shivering are examples of homeostasis

Sweating and shivering are good examples of how your body responds to maintain a steady temperature. Normal human body temperature is 37°C (98.6°F). At this temperature, your cells can perform their functions. When it's too hot and your body temperature begins to rise, glands in your skin produce sweat to cool the temperature back down. When it's too cold and your body temperature begins to lower, shivering is a response that warms your body temperature back up (Figure 2.9).

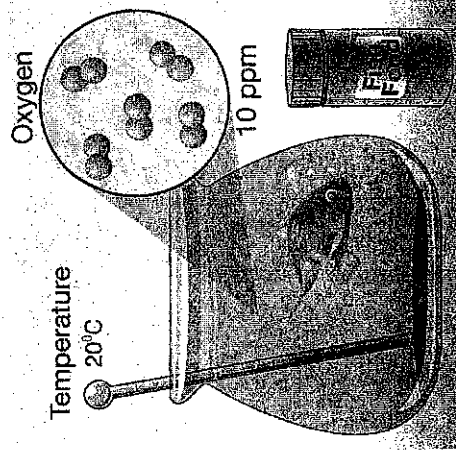
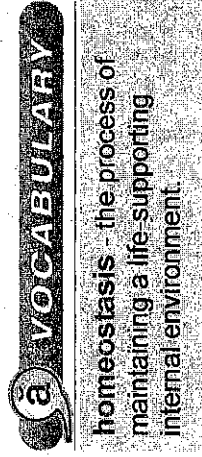


Figure 2.8: A few of the variables that affect an organism's ability to stay alive.

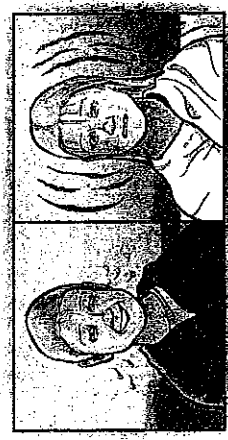


Figure 2.9: Your normal body temperature is 37°C. Sweating and shivering are your body's way of maintaining that temperature.

Jones 8th grade Science

NTI Day 12-How Living Things are organized

Materials

- CPO life science Ebook that is uploaded into google classroom
- 5-6 question quiz

Task

- Students read pages 33-36 in chapter 2.
- Students complete a 5 question quiz.

Quiz-Section 2.2

1. ____ are groups of similar cells that are specialized to carry out a particular function

- a) Homeostasis
- b) Tissues
- c) Organs
- d) Organ systems
- e) Cells

2. ____ are groups of tissues that organize to perform a function.

- a) Homeostasis
- b) Tissues
- c) Organs
- d) Organ systems
- e) Cells

3. Organs interact in groups called ____ to perform related tasks.

- a) Homeostasis
- b) Tissues
- c) Organs
- d) Organ systems
- e) Cells

4. ____ is a process by which organisms maintain stable internal conditions suitable for life.

- a) Homeostasis
- b) Tissues
- c) Organs
- d) Organ systems
- e) Cells

5. Paramecium have contractile vacuoles that pump water out of their body cavities. This is an example of:

- a) The organism maintaining homeostasis
- b) Growth and development
- c) An organism converting radiant energy into chemical energy
- d) An organ system