

Name: _____

Date: _____

Class: _____

ELA 8

Dynamic character

A dynamic character is a character who changes **throughout the story** based on their **experiences or conflicts they encounter on their journey**.

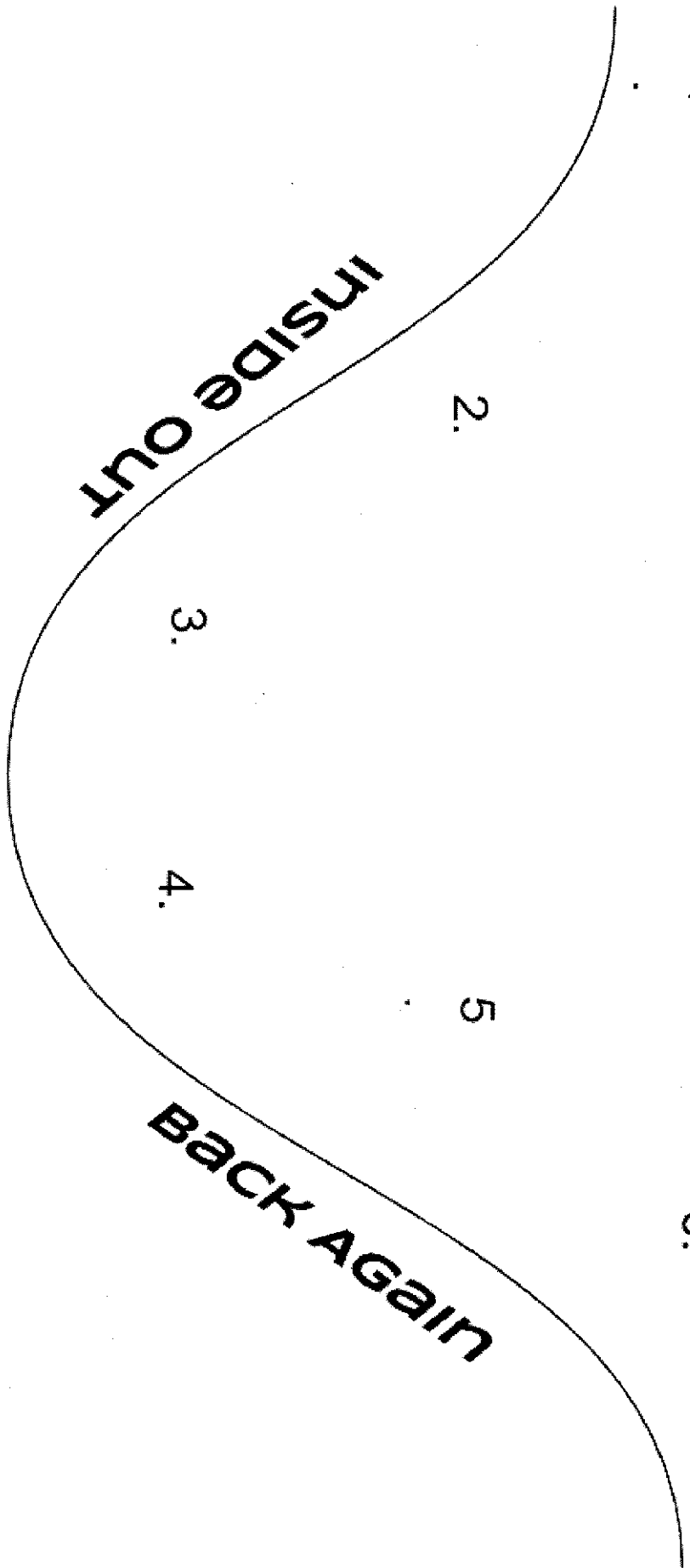
Your Task

In the novel Inside Out and Back Again, Ha is a dynamic character who is turned **inside out** and **back again**. Create a timeline that demonstrates Ha's journey.

- 1) Select a shape that best shows Ha's experience traveling as a refugee from Vietnam to Alabama.
- 2) Select **three examples (specific quotes)** that show Ha's being turned **inside out**. For each quote, **explain WHY** these quotes show that she is being turned inside out:
 - a) What is the difference in Ha's personality?
 - b) What is the difference in Ha's attitude?
- 3) Select **three examples (specific quotes)** that show Ha is "back again," or **starting over** and returning back to normal. **Explain WHY** these quotes show that she is "back again."
 - a) How has Ha shown that she has returned back to herself?
 - b) How has Ha settled into being comfortable in her new environment?

Project Requirements:

- You can create your timeline on nothing smaller than a piece of computer paper. You can create it on a poster.
- The shape you select to demonstrate Ha's change is **your choice**. On the back, there is an example for you.
- Make sure all quotes have a page number, and that you are explaining WHY you selected your quote. This is essentially the C (cite), and E (explain) in ACE.
- Label the areas of the timeline that show Ha is being turned inside out, and when she is back again.
- This is due on **January 3rd, 2016**.



1

INSIDE OUT

2.

3.

4.

5

BACK AGAIN

6.

Book Talk Guiding Questions

For your Book Talk, your task is to write **three paragraphs** about an independent reading book. Requirements for each paragraph are listed below. Use the guiding questions in paragraphs two and three to develop your writing.

For your **first** paragraph, your **summary** should include...

- ★ **Somebody Wanted But So Then** protocol
-

For your **second** paragraph, answer **five** of the following questions...

- ★ What aspects of the book did you enjoy?
 - ★ What aspects of the book were not your favorite?
 - ★ How does the author tell the story?
 - ★ How did the conflict of the book make you feel?
 - ★ Did your opinion about the book change as you read it?
 - ★ Why did you choose the book?
 - ★ Do you like the cover for the book? Do you think it relates well to the story?
 - ★ Was the writing too simple, or too complicated?
-

For your **third** paragraph, your **recommendations** can discuss...

- ★ Who would be interested in this book?
- ★ If a reader enjoys this genre, would they enjoy this book?
- ★ Is this book worth reading even if it does not directly align with your interests?
- ★ How would you convince other people to read this book?

Reminder: This is your opinion about the book. Be honest, and make sure you have evidence to support your ideas. Also, make sure the paragraphs are cohesive and well-written. Do NOT just answer the questions in a list. Add supporting details from the book!

CHAPTER 2 | PACKET

CHAPTER 2

CELL PROCESSES AND ENERGY

SECTION 2-1 **Chemical Compounds in Cells**
(pages 52-55)

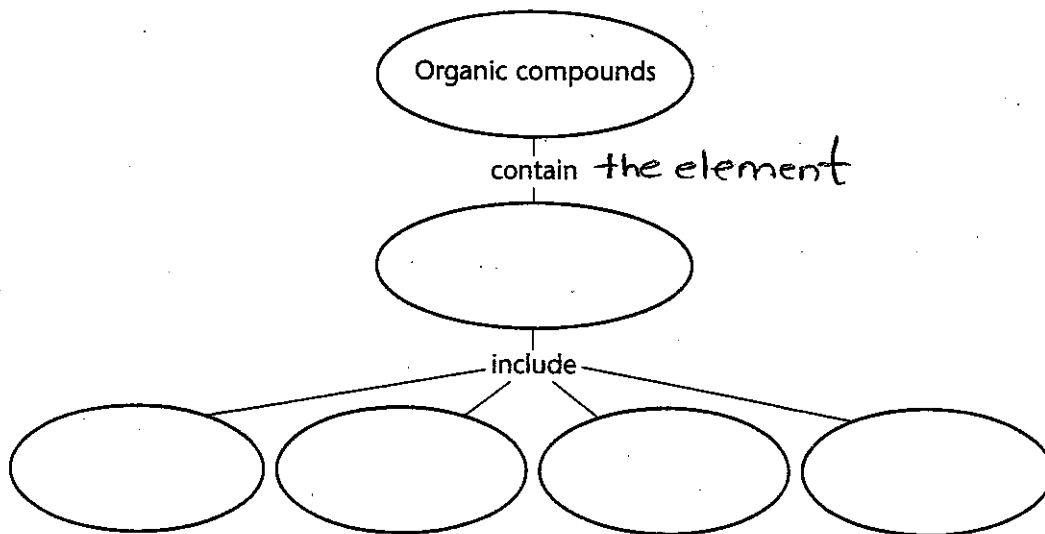
This section identifies the basic building blocks of cells. It also explains the importance of water to cells.

► **Elements and Compounds** (page 52)

1. A(n) _____ is any substance that cannot be broken down into simpler substances. Its smallest unit is the _____.
2. When two or more elements combine chemically, they form a(n) _____. Its smallest unit is called a(n) _____.

► **Organic and Inorganic Compounds** (page 53)

3. Complete this concept map on organic compounds.



4. Compounds that do not contain carbon are called _____.

► **Proteins** (pages 53-54)

- 5. Substances that form parts of cell membranes and many of the cell's organelles are _____.
- 6. What small molecules make up proteins? _____
- 7. What do enzymes do? _____

► **Carbohydrates** (page 54)

- 8. An energy-rich organic compound made of carbon, hydrogen, and oxygen is a(n) _____.
- 9. Is the following sentence true or false? Plant cells store excess energy as starch. _____
- 10. How do cells use carbohydrates? _____

► **Lipids** (page 54)

- 11. What are three examples of lipids?
a. _____ b. _____ c. _____
- 12. How are lipids like carbohydrates? _____

- 13. Cells store _____ in lipids to use later.

► **Nucleic Acids** (page 55)

- 14. Very large organic molecules that contain instructions that cells need to function are called _____.
- 15. List the two kinds of nucleic acids.
a. _____ b. _____
- 16. Is the following sentence true or false? DNA is the genetic material that is passed from parent to offspring. _____

► **Water and Living Things** (page 55)

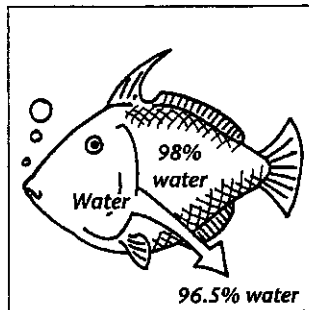
- 17. List ^{Four} ~~three~~ ways that cells use water.
a. _____
b. _____
c. _____
d. _____

SECTION 2-2 REVIEW AND REINFORCE

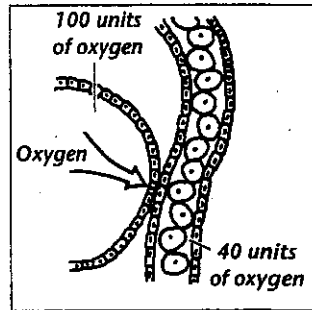
The Cell in Its Environment

◆ Understanding Main Ideas

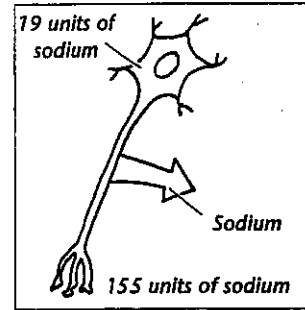
Fill in the blank to identify the process illustrated in each of the following figures.



Water moves out of the cells of a saltwater fish and into the ocean.



Oxygen moves from the lungs into the bloodstream.



Sodium is pumped out of a nerve cell.

1. _____ 2. _____ 3. _____

Answer the following questions on a separate sheet of paper.

4. Explain how osmosis differs from diffusion.
5. Compare and contrast active and passive transport.
6. Identify two methods of active transport.

◆ Building Vocabulary

If the statement is true, write true. If the statement is false, change the underlined word or words to make the statement true.

- _____ 8. If a membrane is selectively permeable, it lets some but not all substances pass through.
- _____ 9. Osmosis is the process by which molecules tend to move from an area of higher concentration to an area of lower concentration.
- _____ 10. The process by which water moves across a selectively permeable membrane is called diffusion.
- _____ 11. Diffusion and osmosis are types of active transport.
- _____ 12. Passive transport requires energy.

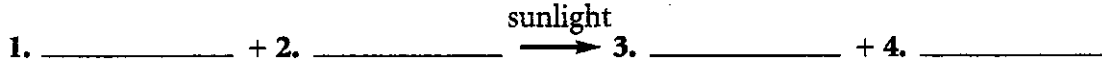
SECTION 2-3

REVIEW AND REINFORCE

Photosynthesis

◆ Understanding Main Ideas

Fill in the blanks in the photosynthesis equation below with the names of the missing compounds. Then answer the questions that follow in the spaces provided.



5. What are the raw materials of photosynthesis?

6. What are the products of photosynthesis?

7. Why is *sunlight* written above the arrow in the equation, rather than on either side of it?

8. Where does photosynthesis occur?

◆ Building Vocabulary

Fill in the blank to complete each statement.

9. The process by which a cell captures the energy in sunlight and uses it to make food is called _____.

10. _____ are colored chemical compounds that absorb light.

11. The main pigment found in the chloroplasts of plants is _____.

12. _____ are small openings on the undersides of leaves through which carbon dioxide enters a plant.

SECTION 2-4 REVIEW AND REINFORCE

Respiration

◆ Understanding Main Ideas

Fill in the blanks in the table below. Then answer the questions that follow in the spaces provided.

Respiration

Raw Materials	Products
1.	3.
2.	4.
	5.

6. Where in the cell does the first stage of respiration take place?

7. Where in the cell does the second stage of respiration take place?

8. How does fermentation differ from respiration?

9. Which type of fermentation occurs in yeast?

10. Which type of fermentation sometimes occurs in the human body?

© Prentice-Hall, Inc.

◆ Building Vocabulary

If the statement is true, write true. If the statement is false, change the underlined word to make the statement true.

_____ 11. The process by which cells "withdraw" energy from glucose is called photosynthesis.

_____ 12. Respiration is an energy-releasing process that does not require oxygen.

UNIT 6: FOOD AND NUTRITION

ACTIVITY 6-1: How Plants Make Food

FACTS AND IDEAS

You have already learned that green plants use the energy of sunlight to make **glucose**, a kind of sugar, in their leaves. In this lesson you will find out how they do it.

Most of the cells in a leaf have green specks called chloroplasts, which contain **chlorophyll**. Chlorophyll can absorb the energy of light and become charged up or energized like a rechargeable battery. One of the things that the energized chlorophyll can do is to split water molecules (H_2O) into hydrogen and oxygen. Some of the energy is then used to combine hydrogen (H) and carbon dioxide (CO_2) into a molecule of glucose ($C_6H_{12}O_6$). The process of making glucose with the energy of light is called **photosynthesis**.

The water for photosynthesis comes from the soil. It is absorbed by the roots and travels up the xylem of the stem and into the veins of the leaf. Carbon dioxide for photosynthesis comes from the air. It enters the leaf through its stomates, the small openings in the epidermis. When the water is split by the energized chlorophyll, only the hydrogen is used in making glucose. The oxygen escapes to the air through the stomates.

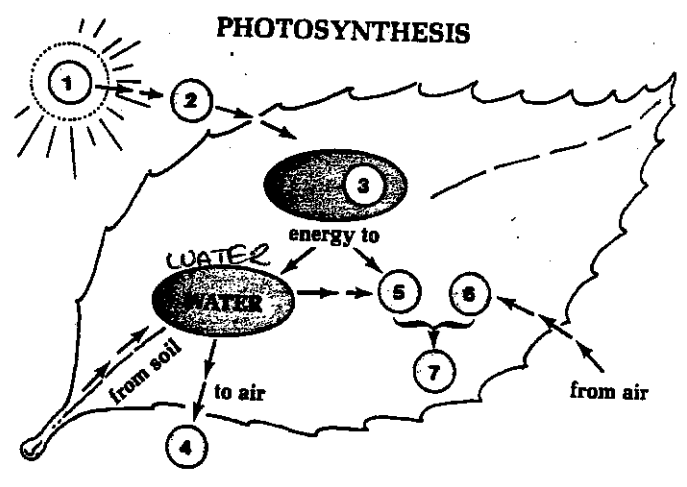
Some of the glucose made in the leaves is carried by phloem tissue to all the other parts of the plant. During the day, the leaves usually make more glucose than the plant needs. The extra glucose molecules are joined together in the plant cells to make large molecules called **starch**. The starch is stored in the leaves, stems, and roots until it is needed.

During photosynthesis, the energy of light becomes stored as **chemical energy** in glucose. When a cell needs energy for its life functions, it gets it from glucose. The glucose is broken down into carbon dioxide and hydrogen. The hydrogen then combines with oxygen from the air to form water. This process is called **cellular respiration**. Can you see that it is the opposite of photosynthesis? In photosynthesis, water and carbon dioxide are used to produce glucose and oxygen. Energy is stored in the glucose. In respiration, glucose and oxygen are used to produce water and carbon dioxide. Energy is taken from the glucose.

DIAGRAM STUDIES

A. For each numbered part of the photosynthesis diagram, select the correct term from the following list. Write the term on the line that has the same number as the part in the diagram.

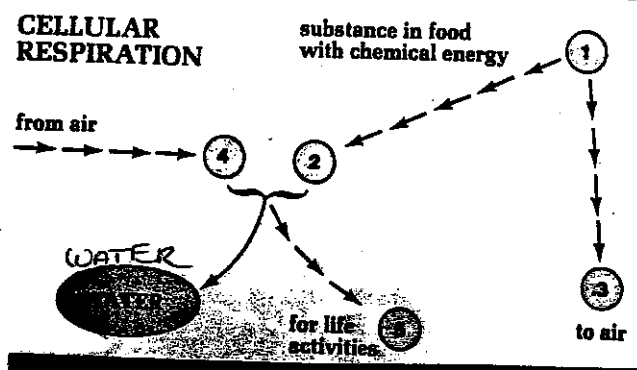
carbon dioxide chlorophyll glucose hydrogen light energy oxygen sun



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

B. For each numbered part of the cellular respiration diagram, select the correct term from the following list. Write that term on the line that has the same number as the part in the diagram.

carbon dioxide energy glucose hydrogen oxygen



1. _____
2. _____
3. _____
4. _____
5. _____

WORD ACTIVITY

Unscramble the letters to form science words used in this lesson and write the words on the lines. Then write the number of each word on the line next to its clue or definition.

1. ucgseol _____
2. rawte _____
3. racbno xidedio _____
4. gtunsilh _____
5. phyichlorol _____
6. charst _____

- ___ a. gives up oxygen to the air during photosynthesis
- ___ b. enters the stomates
- ___ c. green material that can become energized
- ___ d. large molecules made from glucose
- ___ e. sugar that stores chemical energy
- ___ f. source of energy

QUESTIONS

Fill in each blank with the word or phrase that will make the sentence true. Use the words and phrases below.

battery starch chloroplasts glucose photosynthesis
water cellular respiration energized

1. The green specks in food-making cells of plants are _____.
2. Chlorophyll can be compared to a _____.
3. Chlorophyll is _____ by the energy of sunlight.
4. The energy of chlorophyll splits _____ molecules into hydrogen and oxygen.
5. Certain plant cells combine glucose molecules and store them as _____.
6. A process that takes oxygen from the air is _____.
7. A process that adds oxygen to the air is _____.
8. During cellular respiration, the chemical energy of _____ is released for life activities.

CHALLENGE

Scientists investigating photosynthesis have discovered that the process takes place in two main steps. These steps are called the *light reaction* and the *dark reaction*. Using a reference source, find out what part of the process must take place in the light. Also find out what part of the process may take place either in the light or in the dark.

Write a short summary of what you find out.

8th Grade
CURRENT EVENT WINTER BREAK PROJECT
Social Studies



During winter break you are expected to complete this assignment which will count towards your project grade. This increases critical thinking skills and helps prepare you to become a better citizen by being more aware about what is happening in the world. Your assignment will be a current events topic of *your* choice.

Your current event will be due on Tuesday, January 3rd

Although sports are important factors in society and world cultures, we will not be using sports related articles as current events.



You may choose any international, national, or local news article you find interesting, except for sports. You must use a legitimate source of information such as the newspaper, an article you find on the internet under a *news* website (**with your parent's permission**), or a magazine such as National Geographic, Time or Newsweek.

Detailed Procedure

1. **Choose your current events article.** The article should be at least two paragraphs long and have enough information to answer who, what, when, where, why, and how. In addition, you will also need to form an opinion about the current event. If you can't form an opinion on the topic, then the article is not a good choice.
2. **Cut out or print the article.** It should be included somewhere on your current event project or turned in with your rubric. Articles cannot be older than one month from the day they are due unless I have approved it ahead of time.
Ex: A January 3rd current event project cannot use an article older than December 3rd.
3. Be sure to **include/write your source**, including the following information:
 - Date of article
 - Name of magazine, newspaper, website, etc.
 - Name of author
 - Page numbers of article
4. **Write a summary** of the article using your own words. Your summary should be **elaborative and descriptive** and a *minimum* of **8 sentences** long.

****** Answer the questions: who, what, when, where, why, how?**
5. **Write a second 'opinion' paragraph** that is a *minimum* of **4-6 sentences** long. Answer the following questions:
 - a. Why did you choose the article?
 - b. Was the article interesting to you? **Why?**
 - c. How did the article make you feel? Does what you read make you angry? sad? happy? annoyed? scared? **Why?**
 - d. Did you change your opinion after reading the article? **Why?**
 - e. Could something be done to change the situation? If yes, what could be done? If no, explain why not.
6. **Find and record at least one word** you did not know before reading the article. **Record and define** the word.
7. If you get a D/F your parents will be notified.

TRANSFORMATION MAJOR PROJECT**Preparation:**

- Begin with a piece of graph paper.
- Divide the graph paper into four sections (Fold the paper in half both ways to achieve this.).
- Draw AND LABEL the x and y axes using the grid lines closest to the fold lines.
- Draw 4 different polygons in quadrant II (All pre-images should be within the correct quadrant without overlapping or touching the x or y axes, and they should be colored – four different colors.). Label each vertex on the pre-images using variables and write the ordered pairs for them on the coordinate answer sheet.
- Put **one** of the polygons inside another polygon.

Instructions:

- 1) Rotate the entire quadrant 90 degrees clockwise and re-color using the same colors for each shape. Label each new vertex using prime notation (A' , B' etc.) and write the new ordered pairs for each corresponding vertex on the coordinate answer sheet.
- 2) Reflect the entire new quadrant over the x-axis and again re-color using the same colors for each shape. Label corresponding angles with double prime notation (A'' , B'' etc.) and list the ordered pairs of corresponding vertices on the coordinate answer sheet.
- 3) Translate the entire new quadrant ($x-15, y+3$) and again re-color using the same colors for each shape. Label corresponding angles using triple prime notation (A''' , B''' etc.) and list the ordered pairs of corresponding vertices on the coordinate answer sheet.
- 4) After completing step 3, dilate **one** of the shapes with a dilation factor of $\frac{1}{2}$. Label the vertices using quadruple prime notation (A'''' , B'''' etc.) and list the ordered pairs of corresponding vertices on the coordinate answer sheet.

Take your time and be careful! Refer to your notes/rules for help and double check the ordered pairs for accuracy. This is a HUGE assessment grade. Make certain to follow directions carefully!

Your major project grade will be earned from following the directions accurately and completing the steps listed on the rubric on other side of this page. The rubric must be turned in with your coordinate answer sheet as well as your graph paper.

- Pre-Images _____ 2 points: Each of 4 pre-images is a different color.
- _____ 2 points: Each vertex is labeled with variables.
- _____ 2 points: All pre-images are in quadrant II.
- _____ 2 points: One polygon is inside another polygon.
- _____ 2 points: The coordinates listed on the coordinate answer sheet for each pre-image are color-coordinated with the drawings of the original figures and are accurate.

Step 1: Rotation of 90 degrees clockwise *{Hint for those that like transformation rules: $(x,y) \rightarrow (y, -1x)$ }*

- _____ 2 points: Images were rotated 90 degrees.
- _____ 2 points: Images were rotated clockwise.
- _____ 2 points: Images were rotated around the origin accurately and are in quadrant 1.
- _____ 2 points: Corresponding ordered pairs are correct and written on the coordinate answer sheet.
- _____ 2 points: Images are colored with corresponding colors.
- _____ 2 points: Prime notation is used to label all corresponding vertices of the image.

Step 2: Reflection over the x-axis *{Hint for those that like transformation rules: $(x,y) \rightarrow (x, -1y)$ }*

- _____ 2 points: Images are drawn in quadrant IV.
- _____ 2 points: Images are reflected an accurate distance over the x-axis.
- _____ 2 points: Corresponding ordered pairs are correct and written on the coordinate answer sheet.
- _____ 2 points: Images are colored with corresponding colors.
- _____ 2 points: Double prime notation is used to label all corresponding vertices of the new images.

Step 3: Translation _____ 2 points: Images are moved the correct number of spaces horizontally and vertically.

- _____ 2 points: Ordered pairs are correct and written on the coordinate answer sheet.
- _____ 2 points: Images are colored with corresponding colors.
- _____ 2 points: Triple prime notation is used to label all corresponding vertices of the new images.

Step 4: Dilation by $\frac{1}{2}$ *{Hint for those that like transformation rules: $(x,y) \rightarrow (1/2x, 1/2y)$ }*

- _____ 2 points: A single figure has a reduced size.
- _____ 2 points: The figure is dilated by $\frac{1}{2}$ exactly.
- _____ 2 points: Corresponding ordered pairs are correct and written on the coordinate answer sheet.
- _____ 2 points: Images are colored with corresponding colors.
- _____ 2 points: Quadruples prime notation is used to label all corresponding vertices of the new images.

Aesthetics _____ 10 points: Images are drawn with straight edges and vertices are labeled neatly and legibly.