

In Common: Effective Writing for All Students Collection of All Student Work Samples, K-12

By The Vermont Writing Collaborative, with Student Achievement Partners and CCSSO

Eighth Grade
Range of Writing Informative / Explanatory
Writing Samples

File Name: I8R How Mount Olympus is Like a Cell

Informative/Explanatory

Grade 8

Range of Writing

How Mount Olympus is Like a Cell

Have you ever looked at your own cells? No, of course not. You're a mortal and you don't have the power or technology to do that. Maybe some day in the future we shall grant humans the power of microscopic vision. Who knows? That's up to Zeus. Cells are amazing things. Each one is individually different. When I first looked at my own cells I thought, "*WOW there is nothing like this in the whole world.*" I was wrong. Recently, I came to the realization that my own dear Mount Olympus is very much like a cell itself. There are many components in a cells that can also, in a way, be found on Mount Olympus. The structure of a cell and the components within are very like Mount Olympus. What? You don't believe me? Well fine! Come on. I'll show you. Oh, and by the way my name is Eos and I'm the Greek goddess of dawn. I'm responsible for the rising of the sun. Be careful and follow me. Don't let anyone else see you. Mortals aren't allowed up her. Let's go.

In an animal cell, the cell membrane controls what enters and leaves the cell. There are small pores that allow things of different sizes through. Up her, on Olympus what keeps the mortals from entering. or leaving (if they are to be kept here) is an instilled fear of us. Mortals dare not enter unless told to by one of the gods or goddesses. They dare not leave either.

Now, all of you stand still. No, it's okay. This is just a powder that will make you invisible. Nobody move or make a sound. Got it? If you do, it will be your life wasted. I just have to check to make sure that neither Zeus or Hera are in their throne room...Okay, we can go in. Just go silently and quickly! This is

Zeus and Hera's throne room, which is very similar to the nucleus of a cell.

In a cell, the nucleus is the control center of activity on a cellular level It's

Introduces the topic clearly, previewing what is to follow: The writer orients the reader to the narrative setting through which information and ideas will be conveyed, introduces a narrator (the goddess Eos), and establishes the essay's explanatory focus on a comparison between the structure of cells and Mount Olympus.

Organizes ideas, concepts, and information into broader categories: The writer uses a narrative structure (a tour through Mount Olympus) as the frame for conveying specific comparisons between the structure of cells and Mount Olympus

Uses precise and domain-specific vocabulary within accurate evidence to develop topic

Uses appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. Here, the writer is using a chronological narrative structure in addition to the cell structures to aid comprehension.

from here that Zeus and Hera control the happenings of immortals and mortals alike. It's like the control center for the world.

Holy Zeus! Someone's coming in. It's Zeus himself! Quick into here. No noise, no movement, no nothing! Those of you who can peer through the window, do so. You'll be able to see the head god himself! Zeus and his wife, Hera, control the gods, goddesses, and mortals. They are like the chromosomes in a cell. In a cell, the chromosomes determine what kind of cell it will be and how it acts. That is what Zeus and Hera do in the world.

In a cell, the ribosomes turn amino acids into proteins. On Mount Olympus we make many things like laws, rules, and the weather. However, the most material thing that we make are lightning bolts. Of course, only Zeus can actually make them. Although others can use them if they have his permission. See how Zeus only uses his left hand for tasks? That is because his right hand is used to make lightening. Like the ribosomes, his hand takes raw materials (the abundant plasma and energy up here) and creates a whole new product (lightning.) His hand is like the ribosomes in a cell.

Uses precise and domain-specific vocabulary to explain topic

Continues to **analyze** comparison between cell structure / function and Mount Olympus (develops topic, makes meaning clear)

Good, Zeus is leaving. This closet is starting to get stuffy. We should go quickly out into the hall. Now take a right, then a left into here. This is the courtyard. Immortals don't have to eat, but we do it for the pleasure of it. Also, eating helps keep us healthy and happy. The fountains flow with sweet juices and wines. The trees have the best fruits possible. That table over there is always supplied with the most delectable food imaginable. Those chests that are spread around are filled with gold and jewels for our taking. Wearing these helps enhance our godly image. This courtyard represents the vacuoles in a cell. In the vacuoles, large amounts of what the cell needs are stored. Here large amounts of what immortals thrive on is stored.

Don't be alarmed. Those are our mortal slaves. They won't tell on us because I have ordered them not to. In an animal cell, mitochondria store energy and release it when necessary. They power the cell. Here on Mount Olympus, we could not get by with out thee slaves. They perform almost every task that can even slight be considered laborious. The energy they get from food is stored in their bodies and released in order to do tasks.

Uses precise and domain-specific vocabulary to explain topic

In a cell, the ER, or endoplasmic reticulum, help to move substances around the cell. The halls and paths we've been following are very similar to

Uses precise and domain-specific vocabulary within evidence to develop topic

the ER, they are like the roads that contain all movement.

Quick, into this room here. That was Hermes the messenger god. Now that I think of it, he is very much like the golgi bodies in a cell. The golgi bodies package and ship substances from place to place in a cell. Hermes, similarly wraps items up in goat skin and takes them from one person, immortal, or Titan to another.

Now, let's go back to the entrance. You should go. Soon every god, goddess, demi-god, and demi-goddess will be coming. There is a big meeting tonight. So they were all summoned here. By now, I'm sure you can see how Mount Olympus is structured like a cell Just follow that path down there until you get home. Wait, the day is almost over and it'll get dark. Each of you swallow some of this powder. There, this enables you to fly, which is much faster than walking. If you promise not to tell anyone about this and you can go. You swear? Okay, good bye

Provides a concluding section that follows from and supports the explanation presented: The writer restates the main point but also provides a sense of closure to the narrative frame

For this piece of blended writing (informational and narrative) from an eighth-grade science class, students were asked to address the question: "How is a cell like a familiar building or city?" This writer responds by comparing cell structure to the structure of Mount Olympus and writes from the perspective of one of the gods. She begins by orienting the reader to the narrative conceit, providing some context about cells and Mount Olympus, and then stating her main point (Mount Olympus is structured like a cell), thereby previewing what follows in the essay.

The writer organizes the essay clearly by using both a narrative story line (for both reader interest and analogical purposes) and a compare/contrast informative/explanatory structure. She uses appropriate transitions to clarify relationships among ideas and concepts. Within each chunk, the writer uses precise language and domain-specific vocabulary to name and accurately explain elements of the comparison. This makes the writer's thinking and understanding easy to follow.

The tone is conversational and the style relatively informal, both appropriate for this type of blended writing. The conclusion follows from and supports the main point, as well as providing a sense of closure for the narrative.

File Name: I8R How Mount Olympus is Like a Cell

Informative/Explanatory

Grade 8

Range of Writing

How Mount Olympus is Like a Cell

Have you ever looked at your own cells? No, of course not. You're a mortal and you don't have the power or technology to do that. Maybe some day in the future we shall grant humans the power of microscopic vision. Who knows? That's up to Zeus. Cells are amazing things. Each one is individually different. When I first looked at my own cells I thought, "*WOW there is nothing like this in the whole world.*" I was wrong. Recently, I came to the realization that my own dear Mount Olympus is very much like a cell itself. There are many components in a cells that can also, in a way, be found on Mount Olympus. The structure of a cell and the components within are very like Mount Olympus. What? You don't believe me? Well fine! Come on. I'll show you. Oh, and by the way my name is Eos and I'm the Greek goddess of dawn. I'm responsible for the rising of the sun. Be careful and follow me. Don't let anyone else see you. Mortals aren't allowed up her. Let's go.

In an animal cell, the cell membrane controls what enters and leaves the cell. There are small pores that allow things of different sizes through. Up her, on Olympus what keeps the mortals from entering. or leaving (if they are to be kept here) is an instilled fear of us. Mortals dare not enter unless told to by one of the gods or goddesses. They dare not leave either.

Now, all of you stand still. No, it's okay. This is just a powder that will make you invisible. Nobody move or make a sound. Got it? If you do, it will be your life wasted. I just have to check to make sure that neither Zeus or Hera are in their throne room...Okay, we can go in. Just go silently and quickly! This is Zeus and Hera's throne room, which is very similar to the nucleus of a cell. In a cell, the nucleus is the control center of activity on a cellular level. It's from here that Zeus and Hera control the happenings of immortals and mortals alike. It's like the control center for the world.

Holy Zeus! Someone's coming in. It's Zeus himself! Quick into here. No noise, no movement, no nothing! Those of you who can peer through the window, do so. You'll be able to see the head god himself! Zeus and his wife, Hera, control the gods, goddesses, and mortals. They are like the

chromosomes in a cell. In a cell, the chromosomes determine what kind of cell it will be and how it acts. That is what Zeus and Hera do in the world.

In a cell, the ribosomes turn amino acids into proteins. On Mount Olympus we make many things like laws, rules, and the weather. However, the most material thing that we make are lightning bolts. Of course, only Zeus can actually make them. Although others can use them if they have his permission. See how Zeus only uses his left hand for tasks? That is because his right hand is used to make lightening. Like the ribosomes, his hand takes raw materials (the abundant plasma and energy up here) and creates a whole new product (lightning.) His hand is like a the ribosomes in a cell.

Good, Zeus is leaving. This closet is starting to get stuffy. We should go quickly out into the hall. Now take a right, then a left into here. This is the courtyard. Immortals don't have to eat, but we do it for the pleasure of it. Also, eating helps keep us healthy and happy. The fountains flow with sweet juices and wines. The trees have the best fruits possible. That table over there is always supplied with the most delectable food imaginable. Those chests that are spread around are filled with gold and jewels for our taking. Wearing these helps enhance our godly image. This courtyard represents the vacuoles in a cell. In the vacuoles, large amounts of what the cell needs are stored. Here large amounts of what immortals thrive on is stored.

Don't be alarmed. Those are our mortal slaves. They won't tell on us because I have ordered them not to. In an animal cell, mitochondria store energy and release it when necessary. They power the cell. Here on Mount Olympus, we could not get by with out thee slaves. They perform almost every task that can even slight be considered laborious. The energy they get from food is stored in their bodies and released in order to do tasks.

In a cell, the ER, or endoplasmic reticulum, help to move substances around the cell. The halls and paths we've been following are very similar to the ER, they are like the roads that contain all movement.

Quick, into this room here. That was Hermes the messenger god. Now that I think of it, he is very much like the golgi bodies in a cell. The golgi bodies package and ship substances from place to place in a cell. Hermes, similarly wraps items up in goat skin and takes them from one person, immortal, or Titan to another.

Now, let's go back to the entrance. You should go. Soon every god, goddess, demi-god, and demi-goddess will be coming. There is a big meeting tonight. So they were all summoned here. By now, I'm sure you can see how Mount Olympus is structured like a cell Just follow that path down

there until you get home. Wait, the day is almost over and it'll get dark. Each of you swallow some of this powder. There, this enables you to fly, which is much faster than walking. If you promise not to tell anyone about this and you can go. You swear? Okay, good bye.

File Name: I8R Frosty and Friends

Informative/Explanatory

Grade 8

Range of Writing

Frosty and Friends

I need to find out how much Frosty will weigh after 12 days, and how many days it will take until he completely melts away.

How I Derived My Answer

First, I divided 38 by 1.3 to find out how many days it would take for him to completely melt away. I noticed that the answer was 29 days. I also observed that there was a remainder of .3, so it would take the 30th day for him to melt.

Introduces the topic /focus clearly, previewing what is to follow: The writer succinctly lays out the mathematics problem to be addressed, although the introduction assumes that the reader understands the premise

Organizes ideas, information, and concepts into broader categories, using headings and graphics to aid comprehension

1)

Frosty - 38 lbs		
Loses 1.3 lbs. / day		
1.3	3.8	
-	26	20
	12	
-	6.5	5
	5.5	

$$Y = 38 - (1.3x)$$

Y = weight after certain number of days

X = number of days

38 = initial weight

1.3 = pounds lost / day

Uses tables and charts to aid comprehension

After 29 days, Frosty will have .3 pounds of snow left. Thus, he will completely melt on the 30th day.

**Establishes and maintains
a formal style**

2)

1.3	38	
-	1.3	10
	25	
-	2.6	2
	22.4	12 days

Frosty will weigh 22.4 lbs. after 12 days.

= 35.7 after 17 days

22.1	
+	13.6
	35.7

3)

To accommodate with the children's helping Frosty, the new equation will be: $Y = 38 - (1.3X) + 0.8$

The 0.8 stands for the weight of snow the children add to Frosty.

$$1.3 * 17 = 22.1$$

$$+ (0.8 * 17) = 13.6$$

Uses precise and domain-specific language and vocabulary to explain and

Develops the topic with relevant, well-chosen, accurate facts, definitions, and mathematical reasoning.

I divided 38 by 1.3 to find the number of days it would take for him to melt completely.

Then I used my equation to calculate his weight after 12 days. After I divided, I made a new

equation for the third question: $Y = 28 - (1.3X) - 0.8$. I knew that if I did this then I would be able to figure out the third question. Finally, I figured out that if the children added 0.8 pounds of snow to him everyday, he would weigh 35.7 pounds after 17 days.

My Solution

Knowing that he will lose 1.3 pounds per day, it will take 30 days before Frosty completely melts away. Using the equation I made, Frosty would weigh 22.4 pounds after 12 days. Finally, if the schoolyard children pack 0.8 pounds onto him everyday, then he would weigh 35.7 pounds after 17 days.

Uses appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts

Provides a concluding section that follows from the information and explanation given

In this informative/explanatory text from an eighth-grade mathematics class, the writer begins by setting out the mathematical problem of how much Frosty will weigh after twelve days and how long it will take him to melt away completely. While this introduction would be clear enough to those already familiar with this assignment (such as the teacher), other readers might have some questions, such as who built Frosty in the first place or how much he initially weighed.

The writer organizes the explanation by category (problem, approach, solution) and includes subheadings and graphics to aid comprehension. He uses appropriate transitions to clarify relationships among ideas and concepts. Within each chunk, the writer uses precise language and domain-specific vocabulary to accurately describe the problem and explain his reasoning. This makes the writer's thinking and understanding easy to follow.

The tone of the explanation is objective and the style formal—both appropriate for describing mathematical thinking. The conclusion follows from and supports the main point of the piece.

File Name: I8R Frosty and Friends

Informative/Explanatory

Grade 8

Range of Writing

Frosty and Friends

I need to find out how much Frosty will weigh after 12 days, and how many days it will take until he completely melts away.

How I Derived My Answer

First, I divided 38 by 1.3 to find out how many days it would take for him to completely melt away. I noticed that the answer was 29 days. I also observed that there was a remainder of .3, so it would take the 30th day for him to melt.

1)

Frosty – 38 lbs		
Loses 1.3 lbs. / day		
1.3	3.8	
-	26	20
	12	
-	6.5	5
	5.5	

$$Y = 38 - (1.3x)$$

Y = weight after certain number of days

X = number of days

38 = initial weight

1.3 = pounds lost / day

After 29 days, Frosty will have .3 pounds of snow left. Thus, he will completely melt on the 30th day.

2)

$ \begin{array}{r} 1.3 \overline{) 38} \\ \underline{- 1.3} \\ 25 \\ \underline{- 2.6} \\ 2 \end{array} $

Frosty will weigh 22.4 lbs. after 12 days.

after 17 days 22.1

$$\begin{array}{r}
 + \quad 13.6 \\
 \hline
 35.7
 \end{array}$$

3)

To accommodate with the children's helping Frosty, the new equation will be: $Y = 38 - (1.3X) + 0.8$

The 0.8 stands for the weight of snow the children add to Frosty.

Frosty

$$\begin{aligned}
 1.3 * 17 &= 22.1 \\
 + (0.8 * 17) &= 13.6
 \end{aligned}$$

= 35.7

I divided 38 by 1.3 to find the number of days it would take for him to melt completely. Then I used my equation to calculate his weight after 12 days. After I divided, I made a new equation for the third question: $Y = 28 - (1.3X) - 0.8$. I knew that if I did this then I would be able to figure out the third question. Finally, I figured out that if the children added 0.8 pounds of snow to him everyday, he would weigh 35.7 pounds after 17 days.

My Solution

Knowing that he will lose 1.3 pounds per day, it will take 30 days before Frosty completely melts away. Using the equation I made, Frosty would weigh 22.4 pounds after 12 days. Finally, if the schoolyard children pack 0.8 pounds onto him everyday, then he would weigh 35.7 pounds after 17 days.