

FOR TEACHERS ONLY

The University of the State of New York
REGENTS HIGH SCHOOL EXAMINATION

ELA

ENGLISH LANGUAGE ARTS

Friday, June 14, 2024 — 9:15 a.m. to 12:15 p.m., only

RATING GUIDE

Updated information regarding the rating of this examination may be posted on the New York State Education Department's web site during the rating period. Check this web site at <https://www.nysed.gov/state-assessment/high-school-regents-examinations> and select the link "Scoring Information" for any recently posted information regarding this examination. This site should be checked before the rating process for this examination begins and several times throughout the Regents Examination period.

The following procedures are to be used for rating papers in the Regents Examination in English Language Arts. More detailed directions for the organization of the rating process and procedures for rating the examination are included in the *Information Booklet for Scoring the Regents Examination in English Language Arts*.

ENGLISH LANGUAGE ARTS

Mechanics of Rating

Scoring the Multiple-Choice Questions

For this exam all schools must use uniform scannable answer sheets provided by the regional scanning center or large-city scanning center. **If the student's responses for the multiple-choice questions are being hand scored prior to being scanned, the scorer must be careful not to make any marks on the answer sheet except to record the scores in the designated score boxes. Marks elsewhere on the answer sheet will interfere with the accuracy of the scanning.**

Before scannable answer sheets are machine scored, several samples must be both machine and manually scored to ensure the accuracy of the machine-scoring process. All discrepancies must be resolved before student answer sheets are machine scored. When machine scoring is completed, a sample of the scored answer sheets must be scored manually to verify the accuracy of the machine-scoring process.

Rating of Essay and Response Questions

- (1) In training raters to score student essays and responses for each part of the examination, follow the procedures outlined below:

Introduction to the Tasks

- Raters read the task and summarize it.
- Raters read the passages or passage and plan a response to the task.
- Raters share response plans and summarize expectations for student responses.

Introduction to the Rubric and Anchor Papers

- Trainer reviews rubric with reference to the task.
- Trainer reviews procedures for assigning holistic scores (i.e., by matching evidence from the response to the language of the rubric and by weighing all qualities equally).
- Trainer leads review of each anchor paper and commentary. (*Note:* anchor papers are ordered in pairs of high and low within each score level.)

Practice Scoring Individually

- Raters score a set of five practice papers individually. Raters should score the five papers independently without looking at the scores provided after the five papers.
- Trainer records scores and leads discussion until raters feel comfortable enough to move on to actual scoring. (Practice papers for Parts 2 and 3 contain score and commentary.)

- (2) When actual rating begins, each rater should record his or her individual rating for a student's essay and response on the rating sheets provided in the *Information Booklet*, *not* directly on the student's essay or response or answer sheet. Do *not* correct the student's work by making insertions or changes of any kind.
- (3) Both the 6-credit essay and the 4-credit response must be rated by at least two raters; a third rater will be necessary to resolve scores that differ by more than one point. **Teachers may *not* score their own students' answer papers.** The scoring coordinator will be responsible for coordinating the movement of papers, calculating a final score for each student's essay or response, and recording that information on the student's answer paper.

Schools are not permitted to rescore any of the open-ended questions on any Regents Exam after each question has been rated the required number of times as specified in the rating guide, regardless of the final exam score. Schools are required to ensure that the raw scores have been added correctly and that the resulting scale score has been determined accurately.



New York State Regents Examination in English Language Arts

Part 2 Rubric

Writing From Sources: Argument

Criteria	6 Essays at this Level:	5 Essays at this Level:	4 Essays at this Level:	3 Essays at this Level:	2 Essays at this Level:	1 Essays at this Level:
Content and Analysis: the extent to which the essay conveys complex ideas and information clearly and accurately in order to support claims in an analysis of the texts	-introduce a precise and insightful claim, as directed by the task -demonstrate in-depth and insightful analysis of the texts, as necessary to support the claim and to distinguish the claim from alternate or opposing claims	-introduce a precise and thoughtful claim, as directed by the task -demonstrate thorough analysis of the texts, as necessary to support the claim and to distinguish the claim from alternate or opposing claims	-introduce a precise claim, as directed by the task -demonstrate appropriate and accurate analysis of the texts, as necessary to support the claim and to distinguish the claim from alternate or opposing claims	-introduce a reasonable claim, as directed by the task -demonstrate some analysis of the texts, but insufficiently distinguish the claim from alternate or opposing claims	-introduce a claim -demonstrate confused or unclear analysis of the texts, failing to distinguish the claim from alternate or opposing claims	-do not introduce a claim -do not demonstrate analysis of the texts
Command of Evidence: the extent to which the essay presents evidence from the provided texts to support analysis	-present ideas fully and thoughtfully, making highly effective use of a wide range of specific and relevant evidence to support analysis -demonstrate proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material	-present ideas clearly and accurately, making effective use of specific and relevant evidence to support analysis -demonstrate proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material	-present ideas sufficiently, making adequate use of specific and relevant evidence to support analysis -demonstrate proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material	-present ideas briefly, making use of some specific and relevant evidence to support analysis -demonstrate inconsistent citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material	-present ideas inconsistently and/or inaccurately, in an attempt to support analysis, making use of some evidence that may be irrelevant -demonstrate little use of citations to avoid plagiarism when dealing with direct quotes and paraphrased material	-present little or no evidence from the texts -do not make use of citations
Coherence, Organization, and Style: the extent to which the essay logically organizes complex ideas, concepts, and information using formal style and precise language	-exhibit skillful organization of ideas and information to create a cohesive and coherent essay -establish and maintain a formal style, using sophisticated language and structure	-exhibit logical organization of ideas and information to create a cohesive and coherent essay -establish and maintain a formal style, using fluent and precise language and sound structure	-exhibit acceptable organization of ideas and information to create a coherent essay -establish and maintain a formal style, using precise and appropriate language and structure	-exhibit some organization of ideas and information to create a mostly coherent essay -establish but fail to maintain a formal style, using primarily basic language and structure	-exhibit inconsistent organization of ideas and information, failing to create a coherent essay -lack a formal style, using some language that is inappropriate or imprecise	-exhibit little organization of ideas and information -are minimal, making assessment unreliable -use language that is predominantly incoherent, inappropriate, or copied directly from the task or texts
Control of Conventions: the extent to which the essay demonstrates command of conventions of standard English grammar, usage, capitalization, punctuation, and spelling	-demonstrate control of conventions with essentially no errors, even with sophisticated language	-demonstrate control of conventions, exhibiting occasional errors only when using sophisticated language	-demonstrate partial control of conventions, exhibiting occasional errors that do not hinder comprehension	-demonstrate emerging control of conventions, exhibiting occasional errors that hinder comprehension	-demonstrate a lack of control of conventions, exhibiting frequent errors that make comprehension difficult	-are minimal, making assessment of conventions unreliable

- An essay that addresses fewer texts than required by the task can be scored no higher than a 3.
- An essay that is a personal response and makes little or no reference to the task or texts can be scored no higher than a 1.
- An essay that is totally copied from the task and/or texts with no original student writing must be scored a 0.
- An essay that is totally unrelated to the task, illegible, incoherent, blank, or unrecognizable as English must be scored a 0.

The population of the world is rapidly growing. In fact, it has grown so much that the food supply can't keep up. This issue has led many people to search for alternative ways to produce food, beyond traditional farming. One method that was introduced is called vertical farming. Vertical farming grows food floor to ceiling indoors in an effort to save space and increase productivity. However, many other people have doubts as to whether this is the best solution. Although vertical farming has some benefits, because of its carbon footprint, energy demand, and high costs, vertical farming is not a sensible means of supplementing food production.

Vertical farming has a very large carbon footprint. Because of the fact that artificial light is needed to grow the plants, a significant amount of carbon is produced. In fact, "Each kilogram of indoor lettuce has a climate cost of four kilograms of carbon dioxide" (Text 1, Lines 41-42). This is significant because it shows how the needs of vertical farming are actually damaging to the environment. It is not beneficial to implement a system that will do more damage to the climate. Text 3, lines 14-15 state, "on one hand, the world needs to produce more food, and on the other hand, it needs to reduce energy usage and the production of greenhouse gases". Vertical farming only meets one of those parameters. A system that meets both is more beneficial. Switching to vertical farming would help with food supply, but the damage it would do to the climate would have many long-term negative effects.

Vertical farming has a very high energy demand. Vertical farming ~~uses~~ artificial light. Farming inside has disadvantages, since the plants do not get sunlight. "If you farm the old-fashioned way, you take advantage of a reliable, eternal, gloriously free source of energy: the sun" (Text 1, Lines 32-33). Without the sun, plants need a

significant amount of artificial light to grow. This requires a lot of energy, which is not only costly but damaging to the environment. The energy needs of vertical farming are not practical, and it would be more of a hassle than a benefit.

Vertical farming is also very costly. ~~Vertical farming is also very costly. The costs are massive compared to those of traditional farming. This is significant because in order for vertical farming to be a logical supplement to food production, it would need to be affordable. For example, "A 30,000 square foot vertical farm growing leafy greens and herbs in the tri-state area around New York City requires nearly \$4 million in startup capital" (Text 4, lines 22-24). In order for vertical farming to be possible, a significant amount of wealth is required, and this is not always probable. Vertical farming is not affordable, and its cost cannot be justified. In order for it to be a sensible means of supplementing food production, it would need to become much cheaper.~~ "Indoor farms often need humidity control, ventilation, heating, cooling or all of the above" (Text 1, lines 42-43). These costs are massive compared to those of traditional farming. This is significant because in order for vertical farming to be a logical supplement to food production, it would need to be affordable. For example, "A 30,000 square foot vertical farm growing leafy greens and herbs in the tri-state area around New York City requires nearly \$4 million in startup capital" (Text 4, lines 22-24). In order for vertical farming to be possible, a significant amount of wealth is required, and this is not always probable. Vertical farming is not affordable, and its cost cannot be justified. In order for it to be a sensible means of supplementing food production, it would need to become much cheaper.

However, there are some benefits to vertical farming. "The benefits include independence from arable land, year-round growing capacities, less water consumption, and improved crop predictability" (Text 2, lines 45-47). These elements would be very beneficial, especially a year-round growing season, since this would help to drastically increase productivity. However, the costs of vertical farming, in carbon and money, far outweigh these benefits. Vertical farming may work in the short term, but eventually, its shortcomings, especially its carbon footprint

will catch up with it. Many of the benefits to vertical farming may seem enticing, but the issues behind them show otherwise.

With a growing population, it is necessary to find a solution to food scarcity. Although vertical farming is not that solution, there is hope that something better will arise in the near future.

Anchor Level 6–A

CONTENT AND ANALYSIS:

- The essay introduces a precise and insightful claim, as directed by the task (*Although vertical farming has some benefits, because of its carbon footprint, energy demand, and high costs, vertical farming is not a sensible means of supplementing food production*).
- The essay demonstrates in-depth and insightful analysis of the texts, as necessary to support the claim (*This is significant because it shows how the needs of vertical farming are actually damaging to the environment and These costs are massive compared to those of traditional farming. This is significant because in order for vertical farming to be a logical supplement to food production, it would need to be affordable*) and to distinguish the claim from alternate or opposing claims (*These elements would be very beneficial ... since this would help to drastically increase productivity. However, the costs of vertical farming, in carbon and money, far outweigh these benefits*).

COMMAND OF EVIDENCE:

- The essay presents ideas fully and thoughtfully, making highly effective use of a wide range of specific and relevant evidence to support analysis (*In fact, “Each kilogram of indoor lettuce has a climate cost of four kilograms of carbon dioxide”; For example, “A 30,000 square foot vertical farm growing leafy greens and herbs in the tri-state area around New York City requires nearly \$4 million in startup capital”; However, there are some benefits to vertical farming, “The benefits include independence from arable land, year-round growing capacities, less water consumption, and improved crop predictability”*).
- The essay demonstrates proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material [(Text 1, Lines 32–33) and (Text 2, lines 45–47)].

COHERENCE, ORGANIZATION, AND STYLE:

- The essay exhibits skillful organization of ideas and information to create a cohesive and coherent essay, with an opening paragraph that introduces the issue and the claim, followed by three body paragraphs that focus on the negative aspects of vertical farming in regard to *carbon footprint, energy demand* and *costs*, respectively. A fourth body paragraph addresses the counterclaim regarding the *benefits to vertical farming* and is followed by a conclusion that reinforces the claim.
- The essay establishes and maintains a formal style, using sophisticated language and structure (*It is not beneficial to implement a system that will do more damage to the climate; Vertical farming only meets one of those parameters; Many of the benefits to vertical farming may seem enticing, but the issues behind them show otherwise*).

CONTROL OF CONVENTIONS:

- The essay demonstrates control of conventions with essentially no errors, even with sophisticated language.

For many years, and future years to come, our species has struggled to evenly and fairly distribute enough food for the masses. While trying to meet all of society's needs, we always need to consider whether we are going about a solution in the most efficient, effective manner, without dire consequences. Being able to provide for the world population's food production and distribution is a huge responsibility, and using verticle farming may be the most effective way to do so. With the benefits of being a consistent source of food production, and requiring less resources like water and land, verticle farming may be the push needed to help start the creation of a more healthy, and bright future.

Whether the elephant in the room is addressed or not, doesn't mean that it's not there regardless. As a benefit to verticle farming, relying on constancy and consistency is helpful when trying to help support and nourish a growing population, "Climate change has caused more frequent extreme weather events, which can damage an entire season's worth of harvest," (Text 2, Lines 34-35). When we cannot predict the outcome of certain weather events and the impact on our crops, verticle farming allows for us to not have to depend on the hope that each harvest yields enough crops to help feed

the population it needs to support. Not having to rely on the solar energy of the sun is another constant that verticle farming supplies, "... the plants grow faster: You're not limited to the hours of day light the sun delivers," (Text 1, Lines 8-9). Having that dependability that the crops planted while using verticle farming won't have to be replanted or discarded because of some outside force wrecking and destraying them is a safety, and necessity that should be demanded for our food security. To have a weight lifted off thousands of farmer's shoulders on the productivity of their harvest can be gaurenteed while using verticle farming methods.

IF we have a way to reduce the need of other precious resources ~~that~~ being used (and possibly wasted) excessively, then verticle farming may help limit that problem when it comes to Food production. Our planet already suffers from limited access to specific resources, and verticle farming might help reduce the discard of the amount of resources used, "A system that can cut ~~down~~ water use ~~by~~ ~~that~~ up to 95 per cent should command our attention. Less water is a win," (Text 1, Lines 17-19). Not requiring the excessive need of water to be used during a more traditional way of farming can be eliminated with verticle farming. Land-use is already another issue too, and one that verticle farming can fix, "Traditional horizontal farming is limited

by its two dimensions. But if you stack plants 10 or 100 high, that acre can do the work of 10 or 100 farmed acres," (Text 1, Lines 7-8).

Using our new technology to help think of more ~~that~~ through ways to create a solution to our resource use and distribution crisis can help not only produce more food, but make our planet more sustainable as the human population grows. Having verticle farming as a solution to more serious issues involving food accessibility, resource consumption, and consistency can be a new step towards a healthier, and well-fed planet.

Even with all the positives verticle farming offers, there can be some negatives, such as the cost. Money isn't ever easy to come by, and using a lot of it to help grow enough food can quickly become an issue, especially to struggling countries. As ~~is~~ cited, "Although they can't grow as much food, rooftop greenhouses need at least 70 per cent less energy for each square metre of growing area than artificially lit verticle farms," (Text 3, Lines 24-26). Requiring all this energy can demand a lot of money, money that most do not have. But even if many people do not have the funding, many nations, or just local farmers should still consider what they could lose without verticle farming, "Because the climate is controlled, ... farming

requires ~~the~~ few pesticides. Workers are exposed to fewer toxic substances," (Text 1, Lines 20-21). Many may find that if the risk of their health, and or their loved one's health isn't endangered from farming, then the negatives of verticle farming may not sound as displeasing as a hospital visit. Offering new forms of farming, like verticle farming may help make people more open to the positives that it can bring to the table.

Overall, with the benefits of being a consistent source of food production, and requiring less resources like water and land, verticle farming may be the desirable direction to push into while considering more ecofriendly, and sustainable ways to feed the world. Having the dreadful weight of whether or not you and your family can eat isn't something people ever want to consider. With using verticle farming methods, families are not only relieved to have food on their tables, but to have a healthier environment, and reliable food source to depend on. The reliability that verticle farming can provide, in some cases, is better with dealing with the negatives to not having enough food.

Anchor Level 6–B

CONTENT AND ANALYSIS:

- The essay introduces a precise and insightful claim, as directed by the task (*With the benefits of being a consistent source of food production, and requiring less resources like water and land, verticle farming may be the push needed to help start the creation of a more healthy, and bright future*).
- The essay demonstrates in-depth and insightful analysis of the texts, as necessary to support the claim (*When we cannot predict the outcome of certain weather events and the impact on our crops, verticle farming allows for us to not have to depend on the hope that each harvest yields enough crops to help feed the population it needs to support and Many may find that if the risk of their health, and or their loved one's health isn't endangered from farming, then the negatives of verticle farming may not sound as displeasing as a hospital visit*) and to distinguish the claim from alternate or opposing claims (*Even with all the positives verticle farming offers, there can be some negatives, such as the cost*).

COMMAND OF EVIDENCE:

- The essay presents ideas fully and thoughtfully, making highly effective use of a wide range of specific and relevant evidence to support analysis (*"A system that can cut water use by up to 95 percent should command our attention. Less water is a win," and "Because the climate is controlled, ... farming requires few pesticides. Workers are exposed to fewer toxic substances"*).
- The essay demonstrates proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material [(Text 1, Lines 8–9) and (Text 3, Lines 24–26)].

COHERENCE, ORGANIZATION, AND STYLE:

- The essay exhibits skillful organization of ideas and information to create a cohesive and coherent essay, with an introduction that presents the issue and a claim that focuses on how in order to *provide for the world's population's food production and distribution ... verticle farming may be the most effective way*, followed by two paragraphs of support that discuss how vertical farming allows for *constancy and consistency* in food production and how vertical farming reduces *the need of other precious resources*, respectively. A fourth paragraph addresses a counterclaim that focuses on the cost factor and is followed by a concluding paragraph that reaffirms the claim (*Overall, with the benefits of being a consistent source of food production, and requiring less resources ... verticle farming may be the desirable direction*).
- The essay establishes and maintains a formal style, using sophisticated language and structure (*For many years, and future years to come, our species has struggled to evenly and fairly distribute enough food for the masses and Money isn't ever easy to come by, and using a lot of it to help grow enough food can quickly become an issue, especially to struggling countries*).

CONTROL OF CONVENTIONS:

- The essay demonstrates control of conventions, exhibiting occasional errors (*verticle; healthy, and bright; nurish; population, "Climate; thousands of farmer's shoulders; gaurenteed; through"*) only when using sophisticated language.

In recent times, the global demand for food has grown exponentially with the rise in population. The current practice of farming horizontally on land has been unable to produce enough food to support this demand. As such, a method of farming involving hydroponic farming on multi-story buildings known as vertical farming has risen. Despite its high carbon footprint and energy usage, vertical farming remains more efficient and valuable than traditional farming due to its efficient use of space and reduced waste.

Vertical farms are able to grow three-dimensionally, whereas horizontal farms can only develop two-dimensionally (Text 1, line 7). This allows vertical farms to generate more food in less space. According to Text 1, lines 7-8, plants grown "10 or 100 high" use just one acre to produce the same amount of food grown horizontally with "10 or 100 farmed acres." The same amount of food can be made vertically using far fewer acres. This subsequently helps mitigate issues such as deforestation, as farms can be placed on nearly any building, rather than requiring the levelling and destruction of land. Vertical farming allows for efficient food production using less space and using space that normally could not be used for farming.

In addition to less space, vertical farming also uses fewer resources like water and fertilizer. According to Text 2, line 49, vertical farming is "390 times more productive" and uses "95 percent less water." As such, farmers can grow more crops with fewer resources. This leads to an overall higher yield to support a growing food demand. Additionally, a reduced water consumption helps combat the growing issue of water shortage. Text 2, line 18 states, "half of the world's population will experience water scarcity by 2030." Lower water usage in the production of food will allow the farming industry to adapt to these struggles and support the world's population in the face of food demand and water scarcity.

While vertical farming uses less water, it requires more energy, leaving a damaging carbon footprint. Stated by Text 3, lines 12-11, vertical farming requires "higher energy usage due to the need for artificial lighting and climate control systems." While not impossible to produce, higher energy usage damages the climate by leaving a greater carbon footprint. This is especially consequential in the midst of the current climate change crisis. Vertical farming may produce more food, but it does so at the cost of negatively impacting the environment through costly energy requirements.

~~Current~~ Currently facing issues such as deforestation, water scarcity, urbanization, and

climate change have prompted interest in the modification of current farming strategies. It may cost more energy, but farming vertically produces more food for less water in less space.

Anchor Level 5–A

CONTENT AND ANALYSIS:

- The essay introduces a precise and thoughtful claim, as directed by the task (*Despite its high carbon footprint and energy usage, vertical farming remains more efficient and valuable than traditional farming due to its efficient use of space and reduced waste*).
- The essay demonstrates thorough analysis of the texts, as necessary to support the claim (*This subsequently helps mitigate issues such as deforestation, as farms can be placed on nearly any building, rather than requiring the levelling and destruction of land*) and to distinguish the claim from alternate or opposing claims (*While vertical farming uses less water, it requires more energy, leaving a damaging carbon footprint ... It may cost more energy, but farming vertically produces more food for less water in less space*).

COMMAND OF EVIDENCE:

- The essay presents ideas clearly and accurately, making effective use of specific and relevant evidence to support analysis (*plants grown “10 or 100 high” use just one acre to produce the same amount of food grown horizontally and “half of the world’s population will experience water scarcity by 2030.” Lower water usage ... will allow the farming industry to adapt to these struggles and support the ... population in the face of ... water scarcity*).
- The essay demonstrates proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material [*Text 1, line 7*] and [*Text 2, line 18 states*].

COHERENCE, ORGANIZATION, AND STYLE:

- The essay exhibits logical organization of ideas and information to create a cohesive and coherent essay, by first introducing the issue that *the global demand for food* is rising while *farming horizontally ...* has been *unable to ... support this demand* and then stating the claim that *vertical farming remains more efficient and valuable than traditional farming*, followed by two body paragraphs that support vertical farming’s ability to *generate more food in less space* and use *fewer resources*, a third body paragraph that addresses the counterclaim that vertical farming produces more food *at the cost of negatively impacting the environment through costly energy requirements*, then concluding with a reaffirmation of the claim.
- The essay establishes and maintains a formal style, using fluent and precise language and sound structure (*This leads to an overall higher yield to support a growing food demand* and *This is especially consequential in the midst of the current climate change crisis*).

CONTROL OF CONVENTIONS:

- The essay demonstrates control of conventions with essentially no errors, even with sophisticated language.

Every person needs food to survive. An important part of that food is vegetables to maintain a healthy diet. However the production versus demand of plants is extremely unbalanced leaving many without vegetables on a regular basis. According to the Food and Agricultural Organization of the United Nations, "food production must increase by 70 percent before the year 2050 in order to meet global food needs" (Text 2, line 13-14). Although there are some methods that are not reasonable to get us there, Vertical farming is not a sensible means of supplementing food production because it costs more and leaves a larger carbon footprint.

Vertical farming creates a dramatic increase in food pricing. It was found that Kale in "New Jersey-based AeroFarms will cost you a whopping \$14.18 per pound." (Text 4 line 17-18) This is compared to \$1.33 per pound and \$4.99 per pound at Walmart and Whole foods according to Text 4. This price is unreasonable and not affordable for many people leaving them without healthy foods. This is happening "due to the millions of dollars currently needed to build one large indoor vertical farm." (Text 4, line 19-20) The construction cost of a vertical farm leads them to have ~~the~~ to increase their prices in order to make that

money back. However even if a vertical farm is producing more the price of the food is not low enough for most to buy making it not worth it.

Vertical farming has a large carbon footprint which is damaging the Earth as more are made. It was estimated that "indoor lettuce production has a carbon footprint some 7 to 20 times greater than that of outdoor lettuce production." (Text 1, lines 45-46) These conditions are unreasonable in the long run to prevent a higher risk of global warming or climate change. Vertical farming was created to fix one problem but made another worse in the process. Other solutions such as "rooftop greenhouses need at least 70 per cent less energy for each square metre of growing area than artificially lit vertical farms." (Text 3, line 25-26) This shows that there are also methods than vertical farming to improve plant production. Continuing with traditional farming will fail to produce enough food but there are safer methods such as rooftop greenhouses that will help without damaging the Earth too.

Some believe that with the advancement of renewable energy the carbon footprint of vertical farming will decrease. In Text 2 lines 58-60 it is stated "as renewable energy

sources become ~~more~~ adopted more widely, the carbon cost of vertical farming will continue decreasing." They have hopes that in the long run vertical farming will help food production and eventually stop harming the Earth. However, a company in Boston "runs on a combination of renewable energy and non-renewables... Dave Vosburg admits his company is not doing any better than field-grown greens when it comes to carbon usage." (Text 4, lines 34-36) Renewable energy can only do so much and this proves that even with it carbon is still being used in dangerous amounts.

Vertical farming is not a suitable option to increase food production in the future.

It may produce a lot more plants than traditional farming without the use of as many pesticides but the disadvantages outweigh the advantages. We have to have a Earth to live on and use to produce plants and that won't happen when vertical farming is flooding it with carbon.

Anchor Level 5–B

CONTENT AND ANALYSIS:

- The essay introduces a precise and thoughtful claim, as directed by the task (*Vertical farming is not a sensible means of supplementing food production because it costs more and leaves a larger carbon footprint*).
- The essay demonstrates thorough analysis of the texts, as necessary to support the claim (*The construction cost of a vertical farm leads them to have to increase their prices in order to make that money back and Continueing with traditional farming will fail to produce enough food but there are safer methods such as roof top greenhouses that will help without damaging the Earth too*) and to distinguish the claim from alternate or opposing claims (*Some believe that with the advancement of renewable energy the carbon footprint of vertical farming will decrease and However, ... Renewable energy can only do so much and ... carbon is still being used in dangerous amounts*).

COMMAND OF EVIDENCE:

- The essay presents ideas clearly and accurately, making effective use of specific and relevant evidence to support analysis (*It was found that kale in “New Jersey-based AeroFarms will cost you a whopping \$14.18 per pound.” and Other solutions such as “rooftop greenhouses need at least 70 per cent less energy for each square metre of growing area than artificially lit vertical farms”*).
- The essay demonstrates proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material [(Text 1, lines 45–46) and In Text 2 lines 58–60].

COHERENCE, ORGANIZATION, AND STYLE:

- The essay exhibits logical organization of ideas and information to create a cohesive and coherent essay, with an opening paragraph that introduces the issue and a negative claim, followed by two paragraphs of support that focus on the high monetary and carbon footprint costs incurred by vertical farming, noting how *vertical farming was created to fix one problem but made another worse in the process*. A fourth paragraph addresses the counterclaim and the essay concludes with a final paragraph that reaffirms the claim (*Vertical farming is not a suitable option to increase food production in the future*).
- The essay establishes and maintains a formal style, using precise and appropriate language and sound structure (*Vertical farming creates a dramatic increase in food pricing and We have to have a Earth to live on and use to produce plants and that won’t happen when vertical farming is flooding it with carbon*).

CONTROL OF CONVENTIONS:

- The essay demonstrates partial control of conventions, exhibiting occasional errors [*However the; pound.” (Text; (Text 4, line 19–20) The; However even ... more the; Continueing; outway; a Earth*] and the inclusion of indefinite pronouns (*farm leads them and They have hopes*) that do not hinder comprehension.

Vertical farming is not a sensible means of supplementing food production yet. While vertical farming has many benefits, there are many issues that need to be resolved before it can become a reliable source of food.

Vertical farming right now needs a lot of energy to function. The amount of energy used by vertical farming leaves a significant carbon footprint. "Climate cost varies according to conditions, but the estimates I found indicate that indoor lettuce production has a carbon footprint some 7 to 20 times greater than that of outdoor lettuce production" (Text 1, line 44 to 46). While vertical farming does produce more food, the carbon footprint left is very high. As renewable energy sources become used more, the carbon footprint that vertical farming makes will keep decreasing. But until it can keep the carbon footprint low enough, vertical farming is not yet ready to become a reliable food source.

Vertical farming produces food that cost a lot more than organic or locally grown food. Since vertical farms require millions of dollars to build the cost of foods produced will be significantly high until the industry scales up. "Or kale: the conventional variety will run you \$1.33 per pound at Walmart; organic kale costs around \$4.99 per pound at Whole Foods; and vertically farmed kale grown at Newark, New Jersey-based

Aerofarms will cost you a whopping \$14.18 per pound. (Text 4, line 15-18). The costs of food produced by vertical farming will not decrease until the cost of building vertical farms also decrease. The cost of building farms will eventually decrease, right now old fashioned farming is more beneficial.

There are other alternatives to grow food in cities without vertical farms. There are raised beds in communal ~~gardens~~ gardens to rooftop aquaponic systems that grow food with the help of fish. "Although they can't grow as much food, rooftop greenhouses need at least 70 percent less energy ~~for~~ each square metre of growing area than artificially lit vertical farms" (Text 3, line 24-26). These methods all require less energy to produce food than vertical farming. Vertical farming does produce more food, other alternatives are better for the environment.

Vertical farming is not a sensible means of supplementing food production yet. Vertical farms cost a lot of money, they are bad for the environment, and there are other ways to make more food. Vertical farming has a ways to go before it is reliable.

Anchor Level 4–A

CONTENT AND ANALYSIS:

- The essay introduces a precise and thoughtful claim, as directed by the task (*Vertical farming is not a sensible means of supplementing food production yet. While vertical farming has many benefits, there are many issues that need to be resolved before it can become a reliable source of food*).
- The essay demonstrates thorough analysis of the texts, as necessary to support the claim (*The amount of energy used by vertical farming leaves a significant carbon footprint; until it can keep the carbon footprint low enough, vertical farming is not yet ready to become a reliable food source; The costs of food produced by vertical farming will not decrease until the cost of building vertical farms also decrease*) and to distinguish the claim from alternate or opposing claims (*Vertical farming does produce more food, other alternatives are better for the environment*).

COMMAND OF EVIDENCE:

- The essay presents ideas sufficiently, making adequate use of specific and relevant evidence to support analysis (*the estimates I found indicate that indoor lettuce production has a carbon footprint some 7 to 20 times greater than that of outdoor lettuce production; vertically farmed kale ... will cost you a whopping \$14.18 per pound and rooftop greenhouses need at least 70 percent less energy for each square metre of growing area*).
- The essay demonstrates proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material [(Text 4, line 15–18) and (Text 3, line 24–26)].

COHERENCE, ORGANIZATION, AND STYLE:

- The essay exhibits acceptable organization of ideas and information to create a coherent essay, with an opening paragraph that introduces the claim followed by two paragraphs that support the claim by focusing on how vertical farming must improve in both energy usage and cost. A fourth paragraph addresses a counterclaim by noting that *there are other alternatives to grow food in cities without vertical farms* and is followed by a summative paragraph that reiterates the claim that vertical farming *has a ways to go before it is reliable* and, thus, *is not a sensible means of supplementing food production*.
- The essay establishes and maintains a formal style, using precise and appropriate language and structure (*Vertical farming right now needs a lot of energy to function and Since vertical farms require millions of dollars to build the cost of foods produced will be significantly high until the industry scales up*).

CONTROL OF CONVENTIONS:

- The essay demonstrates partial control of conventions, exhibiting occasional errors (*became ... will; But until; that cost; to build the cost; decrease, right; food, other; alot; money, they; others ways; aways*) that do not hinder comprehension.

Vertical farming is pretty conversal when it comes to whether it is good or bad. Vertical farming refers to farms built in buildings controlled by artificial lights. These buildings have multiple floors, which means that on one small property there can be a lot of crops stacked. Some problems with this method are that it has a huge carbon footprint and pollutes a lot. These farms are also very expensive to build. But on the bright side they produce more crops per square foot, consume less water, have year round growing seasons ~~and~~, don't pollute waters, and have improved crop predictability. In this essay I will write about why vertical farms would help society and the world.

Firstly, population is only increasing which means more food is needed. But as the population increases it takes up farmland. But with vertical farming you don't need a lot more land. As said in text 1 "Traditional Horizontal Farming is limited by its two dimensions. But if you stack plants 10 or 100 high, that acre can do the work of 10 or 100 farmed acres." (lines 7-8) ~~So since farm land is becoming building plots for the growing population horizontal farming won't be enough. But with vertical farming, more crops can be grown per square foot.~~ So since farm land is becoming building plots for the growing population horizontal farming won't be enough. But with vertical farming, more crops can be grown per square foot.

Secondly, vertical farming can be controlled. This means that effects from natural disasters, climate changes and the use of water is controlled. Climate change is a big problem in terms of growing crops, but in vertical farming all the growing is done indoors. This means that you can control the temperature. This would all avoid climate change. As said in text 2 "climate change has caused more frequent extreme weather conditions, which can damage an entire season's worth of crops." (lines 34-35).

But with vertical farming you would not need to worry about this loss. Another problem is the huge quantity of water normal farming consumes, often wastes. With vertical farming you can control the temperature and weather in the farm buildings. As claimed in text 2 "Aero Farms, a 700,000 - square foot vertical farm in a renovated steel plant in New Jersey, claims 95 percent less water use and a 390 times more productivity than a commercial field farm with the same square footage." (lines 48-50). This quote shows that vertical farms only serve to help our society and the world.

Lastly, people say that vertical farms pollute. Yes, vertical farms pollute a little, but as technology increases, the pollution they produce will become less and less. in text 4 "vertical farming companies promise more - ~~eco~~ sustainable produce by growing it closer to consumers and using renewable energy to power their operations, the industry still has a long row to hoe." (lines 29-31). This shows that, in the future, it is predicted that vertical farms won't have as bad a carbon foot print. Farms like Fresh box farms have already started to use renewable energy. This farm runs on renewable energy and non renewable energy. This is only a start for vertical farming's carbon footprint.

In conclusion, vertical farms have positive and negative aspects, just like everything, but their problems are being solved. With the population rapidly increasing vertical farming is the way to go. The practice uses less water, less land, with less spread of fertilizer, while growing quicker and results in less waste of crops. Vertical farming is essential for the future in terms of getting enough food for everyone without hurting the world but helping society

Anchor Level 4–B

CONTENT AND ANALYSIS:

- The essay introduces a reasonable claim, as directed by the task (*In this essay I will write about why vertical farms would help society and the world*).
- The essay demonstrates appropriate and accurate analysis of the texts, as necessary to support the claim (*So since farm land is becoming building plots for the growing population horizontal farming won't be enough. But with vertical farming, more crops can be grown per square foot and This means that effects from natural disasters, climate changes and the use of water is controlled*) and to distinguish the claim from alternate or opposing claims (*Lastly, people say that vertical farms pollute. Yes, vertical farms pollute a little, but as technology increases, the pollution they produce will become less and less*).

COMMAND OF EVIDENCE:

- The essay presents ideas sufficiently, making adequate use of specific and relevant evidence to support analysis (*As said in text 1 "Traditional horizontal Farming is limited by its two dimensions. But if you stack plants 10 or 100 high, that acre can do the work of 10 or 100 farmed acres"* and *As said in text 2 "climate change has caused more frequent extreme weather conditions, which can damage an entire season's worth of crops"*).
- The essay demonstrates proper citation of sources to avoid plagiarism when dealing with direct quotes and paraphrased material [*As claimed in text 2 ... (lines 48–50)* and *in text 4 ... (lines 29–31)*].

COHERENCE, ORGANIZATION, AND STYLE:

- The essay exhibits acceptable organization of ideas and information to create a coherent essay, with an introduction that explains what vertical farming and its benefits are, leading to the claim followed by two paragraphs of support that focus on the benefits of vertical farming in regard to not needing *a lot more land* and the fact that *vertical farming can be controlled*. A fourth paragraph states and refutes the counterclaim relating to the pollution created by the carbon footprint of vertical farming and the essay concludes with a paragraph that returns to the claim and the ideas expressed in the introduction.
- The essay establishes but fails to maintain a formal style, using primarily basic language and structure. (*pretty conseversal; good or bad; alot of crops stacked; I will write about why; Firstly, population is only; less and less; wont have a bad a; is the way to go*).

CONTROL OF CONVENTIONS:

- The essay demonstrates partial control of conventions, exhibiting occasional errors (*conseversal; alot; acres."* (lines 7–8) *So since; population horizontal; indoors. this; crops."* (lines 34–35). *But; tempiture; wont*) that do not hinder comprehension.