65 Habitat destruction is an environmental problem that affects our own generation and will affect future generations if it is not solved. Write one or more paragraphs in which you identify a specific habitat that is being destroyed. Explain how the destruction of this habitat relates to humans and the overall ecosystem. Your answer must include at least:

- the name of the habitat and *two* human activities that contribute to the destruction of this habitat [2]
- *one* way the destruction of this habitat has affected humans [1]
- *one* way the destruction of this habitat has affected other organisms [1]
- *two* ways to limit further destruction of this habitat [2]

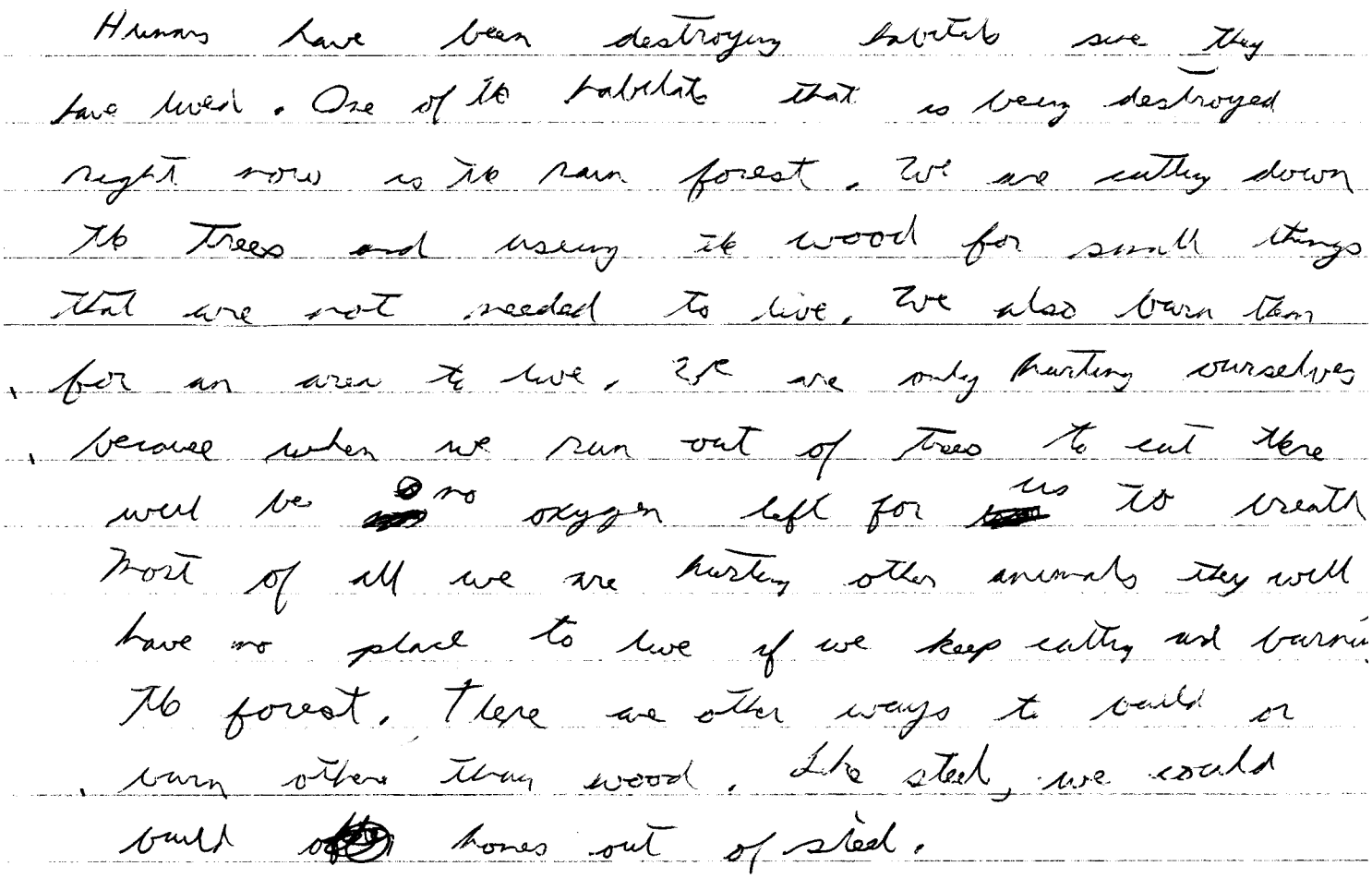
Score Level 6

The destruction of the rainforest affects our generation because were polluting the air because allof the machines used to cut down the trees, and were also running out of the trees because were not planting enough after we cut them down. Two humen activites are that we need paper for school also lumber. And the need for jobs to cut down the trees. It has affected us by air pollution and lack of new trees. It has affected other organisms by taking there homes away from them. Two ways to limit the destruction are to plant more trees then we cut. and find other way's to make paper

Commentary
Score Level 6

- Names a habitat: the rain forest.
- Describes 2 human activities that contribute to the destruction of the habitat: polluting the air and cutting down trees. [2]
- Describes 1 way the destruction of the habitat has affected humans: lack of trees or air pollution. [1]
- Describes 1 way the destruction of the habitat has affected other organisms: taking away their homes. [1]
- Describes two ways to limit further destruction of the habitat: plant more trees than cut and find other ways to make paper. [2]

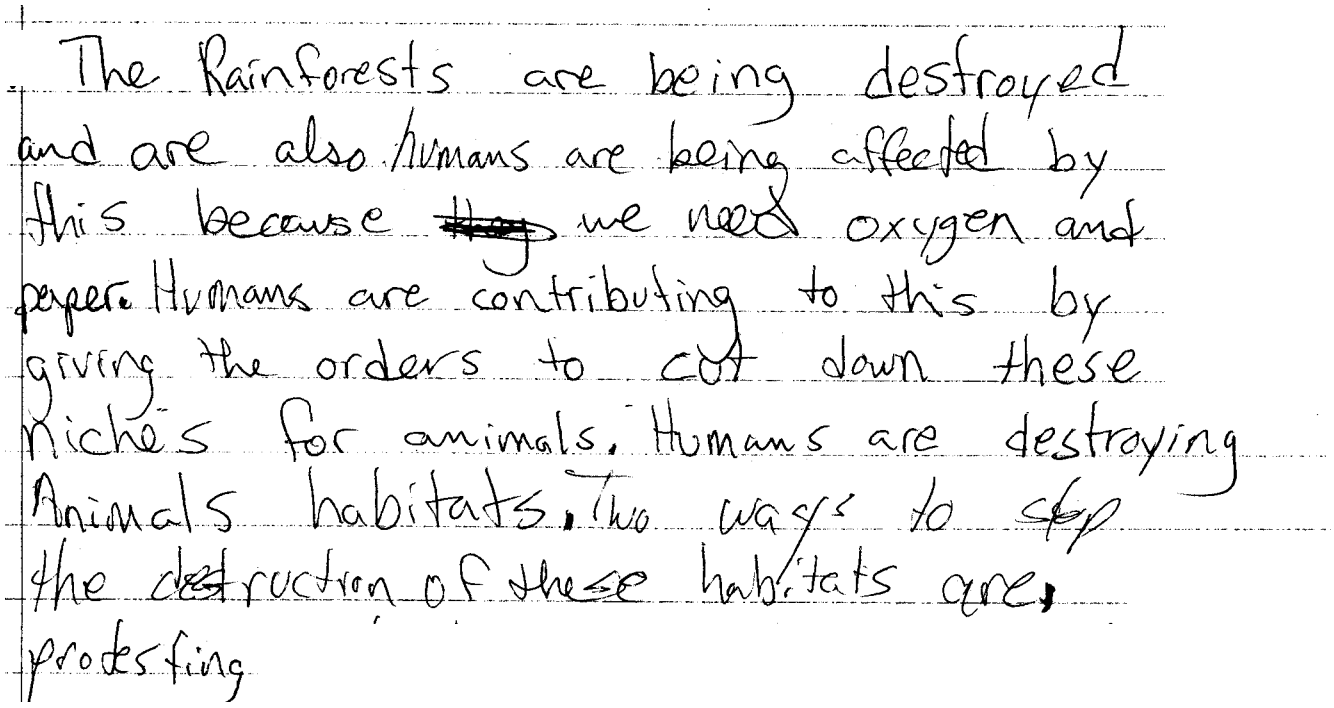
Score Level 5


Humans have been destroying habitats ever they have lived. One of the habitat that is being destroyed right now is the rain forest. We are cutting down the trees and using the wood for small things that are not needed to live, We also burn them for an area to live, We are only hurting ourselves because when we run out of trees to cut there will be no oxygen left for us to breath Most of all we are hurting other animals they will have no place to live if we keep cutting and burning the forest. There are other ways to build or burn other than wood. Like steel, we could build homes out of steel.

Commentary
Score Level 5

- Names a habitat: rain forest.
- Describes 2 human activities that contribute to the destruction of the habitat: cutting trees and burning trees from an area. [2]
- Describes 1 way the destruction of the habitat has affected humans: less oxygen. [1]
- Describes 1 way the destruction of the habitat has affected other organisms: other animals have no place to live. [1]
- Describes 1 way to limit further destruction of the habitat: use something other than wood. [1]

Score Level 4


The Rainforests are being destroyed and are also humans are being affected by this because ~~they~~ we need oxygen and paper. Humans are contributing to this by giving the orders to cut down these niches for animals. Humans are destroying Animals habitats. Two ways to stop the destruction of these habitats are, protesting

Commentary
Score Level 4

- Names a habitat: rain forest.
- Describes 1 human activity that contributes to the destruction of the habitat: cutting down the rain forest. [1]
- Describes 1 way the destruction of the habitat has affected humans: less oxygen. [1]
- Describes 1 way the destruction of the habitat has affected other organisms: cut down niches for animals. [1]
- Describes 1 way to limit further destruction of the habitat: protesting. [1]

Score Level 3

Habitat destruction is an environmental problem that affects our own generation and future generations.

One specific habitat that is being destroyed is the swamplands. Humans have been filling them in with cement and concrete to make shopping malls and business districts which destroys animal life. A way that humans have been affected is that we have one more place to eat or buy things. Other organisms have lost prey or food in the prior swamps and humans need to build on solid dry land.

Commentary
Score Level 3

- Names a habitat: swamplands.
- Describes 1 human activity that contributes to the destruction of the habitat: filling swamplands with cement. [1]
- Describes 1 way the destruction of the habitat has affected humans: providing one more place to eat or buy things. [1]
- Describes 1 way the destruction of the habitat has affected other organisms: loss of food source. [1]

66 Name or describe a technique used in genetic engineering that can be used to alter the genetic makeup of an organism. Give a specific example of how a product of genetic engineering has been used in the field of health care or agriculture. [2]

Score Level 2

A technique used in genetic engineering that can be used to alter the genetic makeup of an organism is artificial gene recombination. What scientists are trying to do is take out bad or disease carrying genes of a person's DNA and replacing them with healthy genes. It will be good to prevent genetic disorders such as Alzheimer's and Parkinson's disease.

Commentary
Score Level 2

- Describes a technique used in genetic engineering that can be used to change the genetic makeup of an organism: gene recombination. [1]
- Gives a specific example of how a product of genetic engineering has been used in the field of health care: gene replacement for disease. [1]

Score Level 1

A genetic technique that has been used is splicing. This has been used in the feild of agriculture in that a cow was made to have humans breast milk, instead of just cows milk

Commentary
Score Level 1

¥ Names a technique used in genetic engineering that can be used to change the genetic makeup of an organism: splicing [1] but fails to give an accurate example of how it has been used.

Score Level 1

Gene splicing makes the same genes with out possibly a certin disorder which eliminates disorders.

Commentary
Score Level 1

¥ Names a technique used in genetic engineering that can be used to change the genetic makeup of an organism: gene splicing [1] but fails to give an accurate example of how it has been used.

67 State two specific reasons why it is important to preserve biodiversity. [2]

Score Level 2

Biodiversity creates a variety of the species enabling that species have a chance to survive and adapt to changing environments Also if we destroy many kinds of plants, we may lose a cure for a disease

Commentary
Score Level 2

- States 2 specific reasons why it is important to preserve biodiversity: increasing chances of survival in changing environments [1] and loss of a possible cure for disease [1]

Score Level 1

It is important to preserve biodiversity because if organisms become extinct then the organisms that prey on them will have very little food sources and they could become extinct and it could set off a chain reaction in the food web. Also the more organisms and species there are, the more resources that cycled around.

Commentary
Score Level 1

- States 1 specific reason why it is important to preserve biodiversity: providing increased stability in ecosystems. [1]

Score Level 0

You need to keep the cycle of animals + organisms going. If you take an organism that will affect the entire circle of life. Animals depend on one another for support + without that support they will die.

Commentary
Score Level 0

¥ Neither of the reasons addresses biodiversity.

68 The DNA sequences of a baby are similar to but not identical to the DNA sequences of its mother. Explain why. [1]

Score Level 1

They are similar because the baby has 23 chromosonces from it's mother but it also has 23 from it's father.

Commentary
Score Level 1

¥ Explains why the DNA sequences of a baby are similar to but not identical to the DNA sequences of its mother: gets 23 chromosomes from the mother but also 23 from the father. [1]

Score Level 0

When a baby is born it gets itsown dNa, that way we can tell who it is with DNa tests

Commentary
Score Level 0

¥ Babies do not get their own DNA when they are born.

69 The production of a normal baby involves protecting the developing embryo from harmful environmental factors. Explain *two* ways in which a pregnant woman could avoid exposing the developing embryo to environmental risks. [2]

Score Level 2

One way a pregnant woman could avoid exposing the developing embryo to environmental risks is by going ~~to safe places that she knows so she could~~ to a place with no smoking signs so that she can not get second hand smoke on the baby would not have its lungs coating before it is born. Another way is not drinking because it will affect the liver and the baby would not be born healthy.

Commentary
Score Level 2

¥ Explains 2 ways a pregnant woman can avoid exposing the developing embryo to environmental risks: going to areas where smoking is not allowed [1] and not drinking. [1]

Score Level 2

A mother could avoid exposing her baby to environmental risks by not being in highly polluted areas, and not going into bars where there is a lot of smoke.

Commentary
Score Level 2

¥ Explains 2 ways a pregnant woman can avoid exposing the developing embryo to environmental risks: not being in highly polluted areas [1] and not going in areas of secondhand smoke. [1]

Score Level 1

Don't drink beer, vodka, or whiskey.

Commentary
Score Level 1

¥ Explains 1 way a pregnant woman can avoid exposing the developing embryo to environmental risks: not drinking alcohol. [1]

Score Level 0

She could stop working to protect the developing embryo and she could also rest more and do little exercise.

Commentary
Score Level 0

¥ Does not address environmental risks.

71 State one possible negative effect of a warming trend on Earth. Specify how this effect will have a *negative* impact on the living environment. [2]

Score Level 2

The warming of Earth would cause the polar ice caps to melt and the ocean to rise ~~with~~ which would cause the continents to shrink which would make the organisms on the continents fight for land and decrease the population of them.

Commentary
Score Level 2

- States a possible negative effect of a warming trend on Earth: the oceans rising and the continents shrinking. [1]
- Specifies how the oceans rising and continents shrinking will have a negative impact on the living environment: organisms on the continents must fight for land and population size will decrease. [1]

Score Level 1

Those that need a cool environment die out. Plants open their stomates and sweat more so they can't keep homeostasis and die.

Commentary
Score Level 1

- States a possible negative effect of a warming trend on Earth: those that need a cool environment die out. [1]

72 It has been suggested that the two actions listed below might help reduce the amount of CO_2 in the atmosphere.

a Increase the number of trees through reforestation.
b Increase the number of animals through wildlife preservation.

Write one or more paragraphs in which you indicate whether or not a process associated with each action (a and b) would contribute to reducing the CO_2 level of the atmosphere and explain why. [4]

Score Level 4

I believe that if we increase the number of trees through reforestation it would contribute to reducing the CO_2 level of the atmosphere because plants (trees) will take in CO_2 and they give off the oxygen that we need to breathe and to live. If we increase the numbers of animals through wildlife preservation, I don't think it would contribute much because like humans they breathe in oxygen, and breathe out CO_2. This would cause more CO_2 to be in the air.

Commentary
Score Level 4

¥ Indicates that increasing the number of trees would reduce the CO_2 level because plants take in CO_2 and give off oxygen. [2]

¥ Indicates that increasing the number of animals would cause more CO_2 in the air because animals take in O_2 and give off CO_2. [2]

Score Level 3

By increasing the number of trees through reforestation would reduce the amount of CO_2 level because trees take in CO_2 and let out oxygen.

By wildlife preservation and increasing the number of animals would not really help CO_2 level because the plants would eat all plants leaving less plants to take in CO_2,

Commentary
Score Level 3

¥ Indicates that increasing the number of trees would reduce the CO_2 level because trees take in CO_2. [2]

¥ Indicates that increasing the number of animals would not help reduce the CO_2 level. [1]

Score Level 1

Increasing the number of trees through reforestation would contribute by adding more oxygen.

Commentary
Score Level 1

¥ Indicates that increasing the number of trees would contribute to reducing the CO_2 level but does not explain why. [1]

Score Level 0

I do not think it would reduce it because we as humans can not control natural gas in the atmosphere

Commentary
Score Level 0

¥ Does not even indicate whether either action would contribute to reducing CO_2 level.

Appendix I

Examination Blueprint

Content	Approximate Weight (%)
Standard 1 (Analysis, Inquiry, and Design) Laboratory Checklist (Appendix A)	10—20
Standard 4	
Key Idea 1	13—17
Key Idea 2	9—13
Key Idea 3	8—12
Key Idea 4	6—10
Key Idea 5	13—17
Key Idea 6	10—14
Key Idea 7	11—13

APPENDIX II
Mapping the Sampler to the Core Curriculum

Standards	Test Sampler Draft Question Numbers		
	Part A	Part B	Part C
Standard 1—Analysis, Inquiry, and Design		42, 43, 44, 45, 56, 57	
Key Idea 1	2	42, 43, 44, 45	
Key Idea 2		50, 59	
Key Idea 3	1, 25, 31	36, 49, 53, 55, 60, 61, 62	
(Appendix A) Laboratory Checklist	3, 22, 25, 28, 29, 31	36, 37, 38, 39, 40, 41, 49, 51, 52, 53, 54, 55, 58, 61, 62	
Standard 4—Science		47, 64	
Key Idea 1	5, 6, 7, 23, 27	46, 47, 56, 57	67
Key Idea 2	8, 9, 11, 12		66, 68
Key Idea 3	10, 13, 14, 15, 16, 18, 31	45	
Key Idea 4	9, 10, 17, 19, 20	63	69
Key Idea 5	4, 5, 7, 21, 22, 23, 24, 25, 26	48, 53, 64	66, 70, 72
Key Idea 6	27, 28, 29, 30, 33, 35	47, 50, 55, 56, 57	67, 70, 72
Key Idea 7	25, 32, 34, 35	56, 57	65, 71

APPENDIX III

Mapping the Core Curriculum to the Sampler

Sampler Ques. No.	Standard	Sampler Ques. No.	Standard
1	St 1 KI 3.5a	37	Laboratory Checklist
2	St 1 KI 1.1a	38	Laboratory Checklist
3	Laboratory Checklist	39	Laboratory Checklist
4	St 4 KI 5.3a	40	Laboratory Checklist
5	St 4 KI 1.2j, 5.3a, 5.3b	41	Laboratory Checklist
6	St 4 KI 1.2g, 1.2h	42	St 1 Intro, KI 1.2a, 1.2b
7	St 4 KI 1.2h, 5.1f	43	St 1 Intro, KI 1.2a, 1.2b
8	St 4 KI 2.1a	44	St 1 Intro, KI 1.2a, 1.2b
9	St 4 KI 2.1d, 4.1b	45	St 1 Intro, KI 1.2a, 1.2b & St 4 KI 3.1d
10	St 4 KI 4.1c, 3.1d	46	St 4 KI 1.2e
11	St 4 KI 2.1f	47	St 4 KI 1.1f, 6 Intro, 6.1f
12	St 4 KI 2.1g, 2.1i	48	St 4 KI 5.1f, 5.1g
13	St 4 KI 3.1b, 3.1d	49	Laboratory Checklist & St 1 KI 3.1a
14	St 4 KI 3.1e	50	St 1 KI 2.3a, 2.3b & St 4 KI 6.1e
15	St 4 KI 3.1g	51	Laboratory Checklist
16	St 4 KI 3 Intro, 3.1f, 3.1g	52	Laboratory Checklist
17	St 4 KI 4.1b	53	Laboratory Checklist & St1 KI 3.1a, & St 4 KI 5.1f
18	St 4 KI 3.1c		
19	St 4 KI 4.1c, 4.1d	54	Laboratory Checklist
20	St 4 KI 4.1g	55	Laboratory Checklist & St 1 KI 3.1a & St 4 KI 6.1e
21	St 4 KI 5.3b		
22	Laboratory Checklist & St 4 KI 5.1b	56	St 1 Intro & St 4 KI 1.1f, 6.1g, 7.1c
23	St 4 KI 1.2g, 5.1d	57	St 1 Intro & St 4 KI 1.1f, 6.1g, 7.2b
24	St 4 KI 5.1g	58	Laboratory Checklist
25	Laboratory Checklist & St 1 KI 3.1a & St 4 KI 5.2j, 7.2c	59	St 1 KI 2.3c
		60	St 1 KI 3.4b, 3.4c, 3.5b
26	St 4 KI 5.2f	61	Laboratory Checklist & St 1 KI 3.4b, 3.4c
27	St 4 KI 1.1f, 6.1d, 6.1f	62	Laboratory Checklist & St 1 KI 3.4b, 3.4c
28	Laboratory Checklist & St 4 KI 6.1a-c	63	St 4 KI 4.1h
29	Laboratory Checklist & St 4 KI 6.1a	64	St 4 Intro, KI 5.3b
30	St 4 KI 6.1b, 6.1d	65	St 4 KI 7 Intro, 7.1c, 7.2b
31	Laboratory Checklist & St 1 KI 3.1a, & St 4 KI 3.1h	66	St 4 KI 2.2a-e, 5.2j
		67	St 4 KI 6.2a, 6.2b
32	St 4 KI 7.1c, 7.3a	68	St 4 KI 2 Intro, 2.1e
33	St 4 KI 6.3b	69	St 4 Kl 4.1f, 4.1h
34	St 4 KI 7 Intro, 7.1c	70	St 4 KI 5.1b, 6 Intro, 6.1b, 6.1c
35	St 4 KI 6.1g, 7 Intro	71	St 4 Kl 7 Intro., 7.1c
36	Laboratory Checklist & St 1 KI 3.1a	72	St 4 KI 5.1b, 5.1d, 6.1b

New York State Education Department, Room 674 EBA, Albany, NY 12234

Living Environment Regents Examination
Test Sampler Draft
Fall 2000
Comment Sheet

Please circle "Yes" or "No" and share your comments for each question below.

1. **Content**—Are the questions generally appropriate in content? YES NO
   Comments:

2. **Difficulty**—Are the questions generally appropriate in difficulty? YES NO
   Comments:

3. **Directions**—Are the directions clear and easy for students to follow? YES NO
   Comments:

4. **Scoring Materials**—Are the scoring materials for Parts B and C clear and easy for teachers to follow? YES NO
   Comments:

5. **Time**—Would most of the students be able to complete this test within the time allotted (3 hours)? YES NO
   Comments:

6. **Additional Comments:**

Please fax this sheet to (518) 473-0858 or mail it to the New York State Education Department at the above address.