STEP 1. Identify Challenges

Read the Future Scene carefully and generate ideas for challenges, concerns, and possible related problems. Choose the 16 most important challenges and write them in the space provided. Writing on reverse side or in margins will not be scored. One additional page for both challenges and solutions is provided. (Page 14)

1. Since predators like tigers and sharks will soon go extinct and be replaced by ancient wolf-like animals, giant lizard whales, etc., these animal replacements may become endangered from the changing climate, possibly causing much individual suffering in these animals.

2. Since conservation groups brought up UN-ECO may not really know, what will happen if animals that were extinct are reintroduced back into changed climates and ecosystems, the animals may cause an unexpected trophic cascade, which could result in more environments being harmed.

3. Since conservation groups are against UN-ECO, but the program is still continuing, conservationists and people in the UN-ECO program may argue over what is humane possibly causing unwanted and stressful social tensions.

4. Since scientists are able to genetically mutate animals, some individuals or organizations may start experimenting on humans creating genetically altered humans which could have negative consequences like super-soldiers or only the wealthy being able to afford CRISPR technologies possibly creating an imbalance.
5. Since De-Extinct animals are GMO's and there could be laws against how GMO's can travel over country borders, the animals may cross said borders, so the animals may have to be killed, but because they are endangered, the country would have to protect them, perhaps causing conflicting laws.

6. Because the scientists will be monitoring the animals, with drones the drones may crash into the animals, possibly injuring them.

7. Since some people like to eat exotic meats, people may try to eat the De-extinct animals. This may result in UN-ECO receiving a lawsuit from the humane society, possibly slowing down their conservation efforts.

8. Since we can use De-Extinction, people may not care if other go extinct because we can resurrect them later.
STEP 1. Identify Challenges (continued)

Writing on reverse side or in margins will not be scored.

9. Because the UN-ECO program only plans to bring back birds, mammals, insects, and grasses without the exclusion of reptiles, trees, amphibians, and other various species of existing plants and animals, this may cause the currently fragile ecosystem of these species to suffer a severe lack of biodiversity.

10. Since the UN-ECO plans to bring back over 100 new species that have had little-to-no contact with human kind, this may create new, dangerous and possibly over-contagious diseases passable between humans and animals that neither human nor animal have ever fought.

11. Because the species that the UN-ECO plan to reintroduce to the current climate have not been in contact with this climate before, this may cause the chosen species to struggle with adaptation, not repairing the climate.

12. Since BUZZNEWS features ads about de-extinction, these ads may cause rumors to pass to the consumers of the website and spark irrational fears of de-extinction.
13. Since scientists and governments are using habitat cameras and AI analyzers to see any changes in the environment, some animals might accidentally destroy the cameras causing the scientists to not get enough information they need.

14. Since experts think they can bring back a specific animal back to save delicate ecosystems and the animal they want to bring back was extinct and they don't really know about the animal, they might release an animal into the delicate ecosystem causing another animal to go extinct.

15. Since temperatures around the world are now higher than ever and scientists think that it will keep getting warmer, earth might get so much more warmer that humans might not be able to live healthy lives as they once did.

16. Since UN-ECO is planning a reality holovision show next year, people might not go to it, causing the UN-ECO to waste their valuable time where they could've spent it on something else that would be helpful.
STEP 2. Select an Underlying Problem

Using the challenges listed in Step 1, identify a problem of major importance to the Future Scene situation. Write your Underlying Problem making sure your question clearly explains the action that will be taken and the desired results/goal of that action.

Writing on reverse side or in margins will not be scored.

Challenge #(s) 2

Since (like conservation groups bought up) UN-ECO may not really know what will happen if animals that were extinct are reintroduced back into changed climates and ecosystems, the animals may cause an unexpected trophic cascade, which could result in more environments being harmed. How might we reintroduce de-extinct animals in a safe manner, so that environmental harm is reduced to a minimum in the year 2039 and beyond around the world?
STEP 3. Produce Solution Ideas

Generate solution ideas to the Underlying Problem in Step 2. Choose the 16 most effective solutions and write the elaborated ideas in the space provided. Writing on reverse side or in margins will not be scored. One additional page for both challenges and solutions is provided. (Page 14)

1. Virtual reality companies will help UN-ECO create "The Future Environment Representation." This will be a V.R. program that has the environments where the de-extinct animals will be reintroduced, with AI animals programmed to have their natural instincts. This V.R. program will be closely monitored by people inside of it to see how the ecosystem and animals react so that environmental harm will be reduced to a minimum.

2. Scientists using CRISPR technology will put specific genes in the de-extinct animals that are going to be re-introduced to change their natural instinct and behavior to make it compatible with the ecosystem they are heading into. These genes will not harm the animals in any way, instead they will reduce environmental harm to a minimum.

3. Biologists will bring new plants that are not extinct but dies living in 2030a, so they know lots about how the environment will react to it. These new plants will help create a more stable environment, so that when de-extinct animals are reintroduced they will not be able to cause unwanted trophic cascades, reducing environmental harm.

4. UN-ECO will first reintroduce these animals to humans because humans have such a large impact on environments and pets have caused extinction before. This will get the humans to trust it, pets to not harm it, allow for the animals to get used to the environment without actually living there and reduce environmental harm.
5. Facebook will make a microscopic camera, that when they release an animal into the wild the camera will follow it and watch it for a specific amount of time and when the animal stirs up any kind of trouble, people will come in and try to stop it.

6. There will be an International Conference where scientists from all over the world will meet up and share all they know about the species and see if they can bring it back in a safe manner.

7. UN-ECO will make a hologram of the animal they want to release into the wild and show the hologram to the animals that were already there and see how they react.

8. Scientists and wealthy land owners will create new environments. These will be secured by a dome (that is bird safe) over a large area of land. These land areas will be changed to be like how the de-extinct animals lived so that the de-extinct animals don't come in contact with modern animals.
STEP 3. Produce Solution Ideas (continued)

Writing on reverse side or in margins will not be scored.

9. The Institute for the Relocation and Reintroduction of Ecosystems and Species (IRRES) also called Iris, will begin a hybrid-reintroduction program. This program and start will begin to genetically test each de-extinct species for genetic matches (2 breeding partners with compatible DNA). Once these matches are found, they will start coxing the animals into breeding and creating hybrid species. Since these species have the traits of the species being brought back (parent 1) and of the parent who is adapted to the current climate (parent 2), these animals (hybridized) will begin to change the climate using parent 1's traits and the de-extinct target species will be continually bred in to be more adapted to the Earth with a new climate, or a new environment.

10. The WHO (World Health Organization) will work with governments and leaders of the world to pass the collective law. This law will prevent the harvest, burning, and purchase of fossil fuels. This new law, being a collective law, spans the Earth. No one is allowed to break and severe punishments will be given to those who do. This law will enable the Earth to begin to return to a balanced environment by stopping the glow of fossil fuels and greenhouse gasses, therefore speeding up the process of repairing the Earth's environment and helping the Earth heal from damage.

11. Old Navy will make a comfortable costume where they will put it on the animal they want to introduce, so that if it looks threatening, the costume will make it look more safe, reducing animal fights.

12. UN-Eco will change the DNA and genes of the animals that are already in the ecosystem so that when de-extinct animals are reintroduced they all act the same and environmental harm will be minimized.
13. The World Wildlife Foundation will make scientifically accurate enclosures that will be secluded, spacious, scientifically controlled, and closed to the public to see how the animals react to others in their modern habitat. If they react well with other species, they will be reintroduced back into the wild.

14. Botanists and Biologists will discover what the reintroduced animal eats and how much so that they can add that food to the environment to ensure that there is enough food for all of the animals, so that animals will not go into competition for food, reducing environmental harm.

15. Bath & Body Works will create a peace-inducing aroma spray called Pure Bliss that will prevent animals from becoming hostile towards each other.

16. Vets from around the world will start a program where they train the species that was extinct and the species that was already there to get along and be friends.
STEP 4. Select Criteria

Generate criteria to determine which solution idea does the best job of solving the Underlying Problem and/or addressing the Future Scene situation. Select the 5 most important criteria for measuring solution ideas and write them in the spaces provided. Writing on reverse side or in margins will not be scored.

1. Which solution safely implements the de-extinct species into the current climate the best?

2. Which solution reduces the amount of environmental harm the most in the year 2050 and beyond?

3. Which solution is best at preventing an unexpected trophic cascade caused the reintroduced de-extinct species?

4. Which solution will most likely be conservation groups that previously disagreed with de-extinction?

5. Which solution is the most time efficient?

STEP 5. Apply Criteria

From the solution ideas written in Step 3, select the 8 ideas with the most potential to solve the Underlying Problem and list them on the grid. Use each criterion to rank the solutions on a scale from 1 (poorest) to 8 (best). The numerical ranking for one important criterion may be doubled.

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GIPS Team Booklet
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Please write your Underlying Problem from Step 2:

Since (like conservation groups brought up) UN-ECO may not really know what will happen if animals that were extinct are reintroduced back into changed environments climates and ecosystems, the animals may cause an unexpected trophic cascade, which could result in more environments being harmed. How might we reintroduce de-extinct animals in a safe manner so that environmental harm is reduced to a minimum in the year 2039 and beyond around the world?

STEP 6. Develop an Action Plan

Develop your top-scoring solution idea into an Action Plan. Thoroughly explain how the Underlying Problem is solved, how the plan will be implemented, and how the Future Scene will be affected.

Writing on reverse side or in margins will not be scored.

Solution # 2

Scientists using CRISPR technology will put specific genes in the de-extinct animals that are going to be reintroduced to change their natural instinct and behavior to make it compatible with the ecosystem that they are heading into. These genes will not harm the animal in any way so it is totally humane. Since scientists already know how to change genes and use CRISPR it will only take about 8 months to implement. This solution reduces environmental harm and trophic cascades. This solution is also fairly time efficient and will lower individual harm in the animals. Arguments may be conservation groups that argue that reintroducing animals is not safe. However, these groups will be shown by UN-ECO how with this gene change how they react will be 100% predictable. This solution will also not cost a lot since UN-ECO already has the knowledge and machinery to do it. An obstacle may be consumers who are against genetically modifying native and animals. However, reports by the New York Times and UN-ECO's holographic show will inform the consumers about how this will actually save
animal lives and ecosystems alike. The gene adaptation will also be totally painless and harmless to the animal. With these gene modifications de-extinct animals will be compatible with 2039's animals, ecosystems, and environments. This safety precaution will be implemented in 2089 all around the world. In 2089 and beyond de-extinct animals will safely be reintroduced, add more ecosystem diversity, protect animals, and prevent food collapse all around the world leading to a better brighter future.