**DATE: 10/13/23**

| **Rating Scale** | **Specification Item** |
| --- | --- |
| 3 | Students should not be learning primarily through text-based instruction or assessment items. Students should learn and be held accountable through gameplay-based problem solving and experience. |
| 5 | All instruction is scientifically and mathematically correct. |
| Y | Confirm that the game is linked to 2/3 or 5 main concepts of the total, whichever is greater. Confirm that the linked main concepts are correctly covered in the game. |
| 5 | All on-screen words spelled correctly and grammatically correct. |
| 5 | Vocabulary and reading level appropriate for the lowest grade level within the target audience and grade band. |
| 5 | Game does not include material that is inappropriate for school. This includes, but is not limited to: violence, firearms, bombs, knives, daggers, blood, gore, smoking, vaping, drug use, any mind-altering substances, alcohol. |
| 5 | Game avoids any stereotypic presentation of gender, race, region, or culture. |
| 5 | Characters are diverse in gender, race, culture, and ability. |
| 3 | Students cannot simply click through and complete the game without learning. Players should be prompted to re-learn and re-do portions of the game where they had poor results due to less understanding of the academic material. |
| 4 | Academic problems are not consistently repeated. Students are presented with different problems to solve. |
| 4 | Gameplay mechanics reinforce the academic material, rather than being completely separate from instruction. I.e, there is a focus on academic reasoning rather than concept / question repetition. |
| 3 | Gameplay is intuitive and a player in the target age range can navigate the game and beat it with enough effort. |
| 5 | Games should be fun and interesting, designed as non-educational games are designed, with design to encourage players to keep playing. |
| N | Game is between 5 and 25 minutes in duration. |

1. **Students should not be learning primarily through text-based instruction or assessment items. Students should learn and be held accountable through gameplay-based problem solving and experience.**

While finding of the locations for colonies on Earth is related and applies some of the concepts, too many of the standards are delivered only in text. The vast majority of the science is through the introductory text or the text when looking for colonies.

1. **All instruction is scientifically and mathematically correct.**
2. **Confirm that the game is linked to 2/3 or 5 main concepts of the total, whichever is greater. Confirm that the linked main concepts are correctly covered in the game.**

I removed a couple of the standards because they were not mentioned at all. There are others that are only in the text and not used in gameplay. In general the game should go into the science deeper than it currently does. It feels very light on the application and understanding.

1. **All on-screen words spelled correctly and grammatically correct.**
2. **Vocabulary and reading level appropriate for the lowest grade level within the target audience and grade band.**
3. **Game does not include material that is inappropriate for school. This includes, but is not limited to: violence, firearms, bombs, knives, daggers, blood, gore, smoking, vaping, drug use, any mind-altering substances, alcohol.**
4. **Game avoids any stereotypic presentation of gender, race, region, or culture.**
5. **Characters are diverse in gender, race, culture, and ability.**
6. **Students cannot simply click through and complete the game without learning. Players should be prompted to re-learn and re-do portions of the game where they had poor results due to less understanding of the academic material.**

The text is very easy to click through and ignore, and since the gameplay in the colonies does not require much content, the text is the main delivery of the science. The colony portions of the game could embed more of the climate, weather, and vocabulary to make it more valuable.

1. **Academic problems are not consistently repeated. Students are presented with different problems to solve.**

The main academic problem is locating the place for the colonies. This process does not offer any challenge as it feels like it is clicking on areas and testing them. There is no real thought or problem solving needed by the students.

1. **Gameplay mechanics reinforce the academic material, rather than being completely separate from instruction. I.e, there is a focus on academic reasoning rather than concept / question repetition.**

The major gameplay in the game is the colony building, which plays more like a regular video game but does not have enough embedded science. Consider adding portions where the player needs to identify climate elements, or figure out what type of climate they are in instead of having them search for it.

1. **Gameplay is intuitive and a player in the target age range can navigate the game and beat it with enough effort.**

Clearer instructions, specifically in the locating of the places to build the colonies would be very helpful. It took me a long time to see all of the variables to test and find the right areas to click. Perhaps leading the student through the first one completely would shorten the game time and eliminate frustrations.

1. **Games should be fun and interesting, designed as non-educational games are designed, with design to encourage players to keep playing.**
2. **Game is between 5 and 25 minutes in duration.**
   1. **If not, please indicate how long it took you to complete. (not including time to pause and take review notes).**

This game took me over 30 minutes to complete, and I could see it going longer if students do not use the fast forward feature.