Art

- The child learned about creativity and design as they built and customized their own vehicles in the game.
- They explored different color schemes and visual elements while painting and decorating their vehicles.
- They experimented with various shapes and structures to create unique and visually appealing designs.

English Language Arts

- The child practiced their reading comprehension skills by following the game's instructions and understanding the mission objectives.
- They developed their writing skills by documenting their progress and reflecting on their experiences in the game.
- They engaged in critical thinking as they evaluated the effectiveness of their vehicle designs and made adjustments to improve performance.

Foreign Language

- The child expanded their vocabulary by encountering various terms related to vehicles, construction, and engineering in the game.
- They practiced listening skills by following audio instructions and communicating with other players in multiplayer mode.
- They learned about different cultures through the game's international community, interacting with players from around the world.

History

- The child gained an understanding of historical transportation and engineering advancements as they built and tested different vehicles in the game.
- They learned about the evolution of transportation technology and how it has influenced society throughout history.
- They explored historical landmarks and landscapes in the game world, fostering an interest in historical settings and preservation.

Math

- The child applied mathematical concepts such as measurement, geometry, and proportions while building and modifying their vehicles.
- They practiced problem-solving skills by calculating distances, speeds, and forces to optimize their vehicle's performance.
- They learned about physics principles, such as gravity and momentum, through trial and error in the game.

Music

- The child explored their creativity by composing and customizing their own soundtracks for their vehicles in the game.
- They learned about music production and arrangement as they experimented with different instruments and melodies.
- They developed an appreciation for the role of music in enhancing gameplay experiences.

Physical Education

• The child engaged in physical activity while playing the game, as they used hand-eye coordination and reflexes to control their vehicles.

- They developed spatial awareness and body control as they maneuvered their vehicles through challenging terrains.
- They learned about the importance of fitness and endurance, as some missions required longdistance exploration.

Science

- The child learned about the principles of engineering and physics through trial and error in designing and testing their vehicles.
- They explored concepts such as aerodynamics, energy conservation, and structural stability while constructing their vehicles.
- They developed problem-solving skills and critical thinking as they identified and fixed issues with their vehicle's performance.

Social Studies

- The child gained an understanding of teamwork and cooperation through multiplayer interactions with other players in the game.
- They explored different cultures and societies by interacting with players from diverse backgrounds.
- They learned about environmental conservation and sustainability as they navigated through various landscapes in the game.

Continued development related to the activity can include encouraging the child to research and explore real-world applications of the concepts they learned in Trailmakers. They can also experiment with designing and building physical models of vehicles using materials like clay, cardboard, or recycled materials. Encourage them to document and explain their design process, just like they did while playing the game. Additionally, they can research historical vehicles and advancements in transportation technology to gain a deeper understanding of the subject.

Book Recommendations

- <u>The Wright Brothers</u> by David McCullough: This book explores the story of the Wright brothers and their journey to inventing the first successful airplane. It delves into the history of aviation and the impact their invention had on the world.
- <u>Hidden Figures</u> by Margot Lee Shetterly: This book tells the true story of a group of African-American female mathematicians who played a crucial role in NASA's space program during the Space Race. It highlights their contributions to science, technology, engineering, and mathematics.
- Engineering: Cool Women Who Design by Vicki V. May: This book profiles various women engineers who have made significant contributions in their respective fields. It showcases their achievements and inspires young readers to consider careers in engineering.

If you click on these links and make a purchase, we may receive a small commission.