**NAME:** CAWIKE CHISOM DELIGHTSOME

**SCHOOL:** HAVEN OF HOPE ACADEMY

**CLASS:** JSS3

**HEARING THE IMPOSSIBLE**

We’ve all been there before. Well, at-least I know I have. That moment where you’re stuck with rest of your family watching documentaries of these geniuses who changed the world. I had always been fascinated by stories of exceptional individuals who overcame remarkable challenges. Helen Keller, Thomas Edison, and Ludwig van Beethoven stood out for their achievements despite deafness or hearing loss. Their experiences struck a chord with me, and I realized that millions struggle with communication due to hearing or speech impairments.

As I watched the documentaries about these remarkable individuals, I began to notice a common thread – their resilience and determination in the face of adversity. Their stories sparked a realization: our bodies’ limitations don’t define our potential. This inspired an idea – using stem cell therapy to overcome hearing and speech impairments, just like these heroes overcame their challenges.

Stem cell therapies are medical treatments that use stem cells to repair or replace damaged cells in the body. In the context of hearing loss, stem cell therapies aim to regenerate or repair damaged cells in the inner ear, such as hair cells or auditory neurons, to restore hearing function.

Stem cell therapies had been thought of before, but nobody has ever been truly able to fully restore natural hearing in humans with severe to profound sensorineural hearing loss or single-sided deafness, particularly in cases where auditory nerves or hair cells are damaged or non-functional.

Stem cell therapies have a lot of potential. If this is thought through, we could be able to conquer deafness and dumbness in the society. Stem cell therapies aim to treat genetic diseases by altering the genes of a patient’s cells. Stem cells can be transformed into auditory sensory hair cells and auditory neurons.

They also have the potential to treat sensorineural hearing loss, which is currently untreatable with conventional hearing aids or cochlear implants. This therapy would not only aid hearing but could also improve speech recognition in patients with hearing loss. It could reduce the need for medical devices like cochlear implants, and could potentially be used as a monotherapy for hearing loss in the future.

So far, the only downsides of this therapy would be majorly cell rejections - leading to an immune response or inflammation, uncontrolled growth - leading to abnormal tissue formation or overgrowth, and high costs – they could be expensive.

Regardless, I am ready to take my idea head on. I’ve been told that there is no innovation and creativity without failure. The feasibility of stem cell therapies is near impossible. But I guess that’s the thing about being a child – I have no idea what the word impossible means.