**Science Challenge 2024 Questions**

What is a scientific discovery/invention/development which has had real world impact?

Just because we discover or create something doesn’t mean that anything changes, so I want you to explore the Hidden Depths of discovery, taking a deep dive into the true meaning of that discovery. After a discovery was made what changed? Who benefited? I want to hear about real world changes and benefits. **– Prof Jamie Gallagher**

a) Video (max. 3 minutes 30 seconds)

b) Pop Science Article (max. 1000 words)

As the commercialisation of Space grows at an ever faster pace and companies such as Virgin Galactic, Blue Origin and Space X now regularly launching commercial astronauts, has the time come to limit access to space to protect the space environment for future generations? Or should we welcome private companies engagement in the space environment, removing the barriers of national agencies such as NASA, ESA and Roscosmos, allowing everyone on Earth access to Space and its potential **– Dr Simon Foster**

a) Video (max. 3 minutes 30 seconds)

b) Essay, News/Magazine article (max. 1000 words)

The first draft sequence of the human genome took a global effort by hundreds of researchers 13 years and cost around $3bn. Now the cost of sequencing a human genome is $1000 and takes just over 24 hours. What do you think is the most significant consequence of this advance? **– Prof Tony Cass**

a) Video (max. 3 minutes 30 seconds)

b) Voiceover of Presentation Video (max. 3 minutes 30 seconds)

You are the head of a UK based vaccine development group when a new virus is discovered that is more infectious and more lethal than the recent Covid19 virus. Tell us about some of the issues and challenges you will face (which might involve research, production, clinical trials and communications) and how you will try to resolve them to accelerate the launch of a safe and effective vaccine. **– Royal College of Science Association**

a) Video (max. 3 minutes 30 seconds)

b) Essay (max. 1000 words)

Tell us something that’s far more than what meets the eye. This is an opportunity for you to dive into one of a broad range of topics to really showcase your scientific curiosity and inquiry. **– Young Scientists Journal**

a) Video (max. 3 minutes 30 seconds)

b) Magazine article/Poster (max. 1000 words)