



## IS SPACE EXPLORATION AN ASTRONOMICAL WASTE OF MONEY?

Humans have always had the urge to explore: whether for discovery and curiosity or for power and riches, explorers have set out into unknown lands and opened up new places. When the Earth seemed to have revealed all its secrets, man turned his gaze on the mysteries of the universe and found ways of exploring out into space. The space race of the 1950s and 60s saw incredible developments in technology, culminating with Neil Armstrong becoming the first person to walk on the moon in 1969. The impossible had become possible and science-fiction had become reality. Now, some scientists, politicians or entrepreneurs are looking further and asking ‘what next?’. However, others are stopping to ask whether we should press pause on our dreams for space travel. Is space exploration a noble goal or should we instead focus on solving the problems of this planet first?

Organisations such as NASA (the United States’ agency responsible for the space program) receive government funding: in NASA’s case, it received over 22 billion dollars in 2022. Whilst this sounds like a lot of money, it actually represented a mere 0.5% of the US budget in that year. Advocates of the space program argue that this is excellent value for money given the benefits the program brings. Technology developed for space travel has been used here on Earth to solve problems and improve life for people who will never venture outside the Earth’s atmosphere. From wireless headsets, and scratch-resistant lenses to camera phones and freeze-dried food, it all started as technology on spacecrafts. Who knows what the next scientific or engineering breakthrough will be: only by pushing the limits of our world will we find out.

In addition to this benefit, space travel may help humans solve the problems of this planet in other ways. Overpopulation means that Earth is struggling to cater for our needs. Exploiting the resources of other planets may be a solution. Could we even make another planet or moon habitable for human beings? There are some people who think we must explore this possibility. Setting all this aside, is it not good for its own sake to learn more about the universe we live in and to follow that curiosity wherever it takes us?

On the other side of the argument, opponents of space travel believe that the money spent on exploring space would be better spent here on Earth directly helping people and planet. Can it be justified to spend billions on sending people to space when issues such as homelessness, poverty, war and famine are still blighting mankind? They reject the suggestion that the solutions to these problems lies in space and insist



that we have a moral duty to use the billions of dollars spent on the space program for efforts to address these global issues instead. Having harmed our planet and its residents so much, why do we have the right to then go and do the same to another planet? After all, when Europeans colonised America, did all of the problems of the world just go away?

Space missions, both manned and unmanned, are already being planned for the future. Space tourism too is beginning to open space travel up to the very wealthy. For better or worse, it seems that humans will be venturing outside our atmosphere and reaching for the stars.

## EXPLANATION FOCUS

1. The overall mood of the introduction is positive. Which sentence marks a change in this mood?
2. What does the word blighting suggest about the writer's opinion about the scale of the world's problems?
3. Why does the writer compare efforts to make other planets habitable to colonising America?
4. Find and copy a quotation from the text to support these viewpoints:

<b>Space Travel is not very expensive.</b>	
<b>Space technology benefits everybody.</b>	
<b>We might not be able to rely on the Earth forever.</b>	
<b>We have a responsibility to look after this planet.</b>	

## VIPERS QUESTIONS

**R**

What was the biggest achievement of the space race?

**I**

How do you think people felt about a man walking on the moon? Use evidence from the text to support your answer.

**R**

What technologies have space programmes helped develop?

**V**

What does *habitable* mean?

**V**

What does *venturing* mean?