

Design a Space Telescope KS4



Example Proposal Letter

Dear _____,

We would like to propose a project to send a telescope into space on board a telescope. The aim of the mission is to _____.

Previous similar missions are _____ . This mission will advance on these by _____

Instruments

The instruments on board will be _____
_____. They will allow the science goals to be met by

Mirror

The main mirror of the telescope will be _____ . This will allow the instruments to achieve resolutions from _____ to _____ .

Cooling System

The minimum operating temperature required by the instruments is _____ Kelvin. The temperature on board the satellite will be _____ .

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Mass budget

The total mass of the satellite will be _____. The breakdown from the individual components is given below

Mass budget	
Satellite Structure:	
Mirror:	
Cooling System:	
Instruments:	
Total Satellite mass:	

Orbit Selection

The satellite will observe from _____, at a distance of _____ from Earth. The orbital period will be _____, and the maximum fuel lifetime for maintaining such an orbit is _____. The mission duration will be _____ years

Launch vehicle and site

To reach orbit, the satellite will be launched on a _____, operated by _____, from _____. The maximum capacity of this launch vehicle is _____,

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Budget

The total cost of the mission will be _____ .

Cost	
Satellite Structure:	
Mirror:	
Cooling System:	
Instruments:	
Development cost:	
Launch cost:	
Ground control cost:	
Operations cost:	
Total mission cost:	

Kind Regards,
