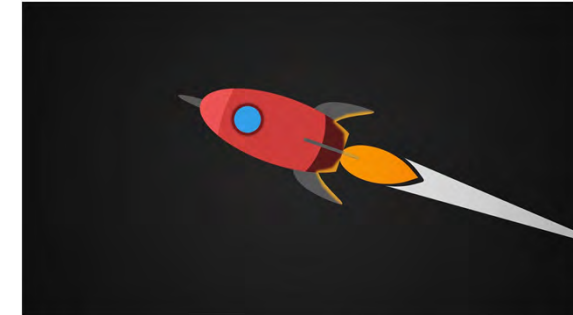


Maths

Year 5 Transition Summer Task

Ticket to the stars



- The cost of sending rockets into space has been an expensive business. The estimated cost for NASA Space Launch System project is **\$15.109 billion** and back in 2012 they estimated each launch would cost **\$500 million** ; the first launch is not scheduled until June 2020.



Ticket to the stars

- For entrepreneur **Elon Musk** this was too expensive for the *common man* if we are ever going to successfully colonise on Mars. His SpaceX company is developing the BFR, which is fully reusable therefore far cheaper; the development cost is around £5,000,000,000. He has said “I’m confident moving to Mars (return ticket is free) will one day cost less than \$500k & maybe even below \$100k. Low enough that most people in advanced economies could sell their home on Earth & move to Mars if they want.”



Click on Elon's face to see what has happened during lockdown

Building a rocket to compete

- All Year 5 students will be building a rocket this summer with the following aims
 - To fly the furthest...can you fly past Mars?
 - To have the lowest budget...companies love to keep the cost down.
 - To look the *flyest!*



Your budgets

- Each of you has a budget of £1000 but what does that buy you?

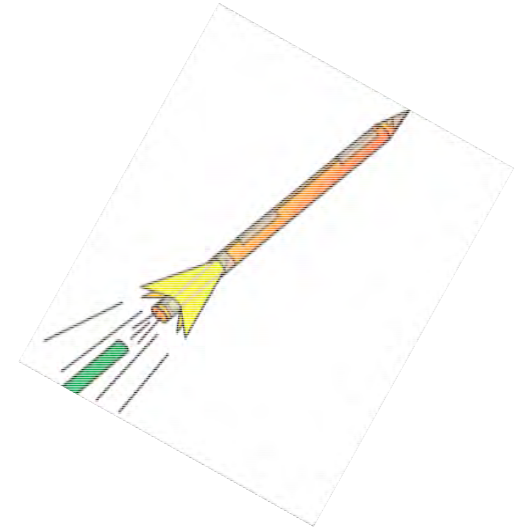
ITEM	COST
A piece of A4 card	£300
A piece of A5 card	£180
A piece of A4 paper	£150
A piece of A5 paper	£100
A pair of scissors	£120
A glue stick	£150
A roll of tape	£100
A pencil	£80
A pen	£60



- Each of you will now need to search your house for materials*.
 - You will need to record your spending on your budget sheet.
- *Ask permission first

Budget sheet

ITEM	COST	Bought
A piece of A4 card	£300	
A piece of A5 card	£180	
A piece of A4 paper	£150	
A piece of A5 paper	£100	
A pair of scissors	£120	
A glue stick	£150	
A roll of tape	£100	
A pencil	£80	
A pen	£60	
Total spent		£



Calculating distance

- How are we going to measure how far your rocket has travelled?
 - What measurements would you suggest?
 - Why do we have different measurements?
 - Can you categorise the different measurements?

