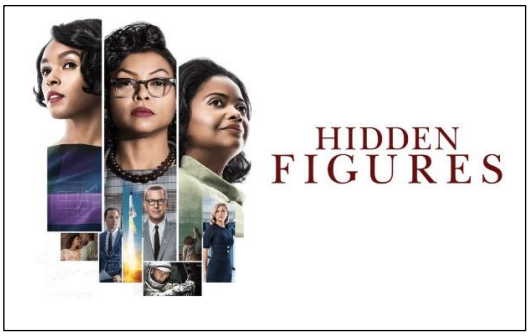
‘Maths at the Movies’

Article for DMAT Website from Mellis CE Primary



‘Hidden Figures’

For our inspiration, the School took the movie Hidden Figures, the story of the unrecognised work of three women of African-American heritage that supported the moon missions of 1969 and beyond.

Through pictures and video clips, the children were shown how these ‘human computers’ helped develop the maths that underpinned the amazing achievement of the Apollo moon-shots. For the older year groups, it was also discussed how social attitudes of the time toward women and African Americans meant that their contributions were overlooked until the publication of the book and subsequent film of the same name.

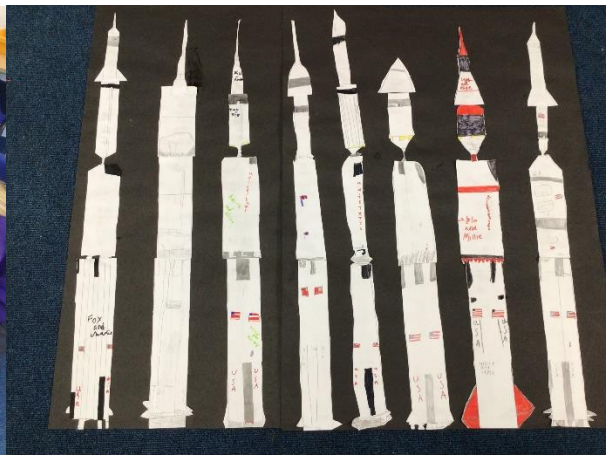
In terms of learning, our attention focussed on the rockets and the possibilities of maths around these iconic machines!

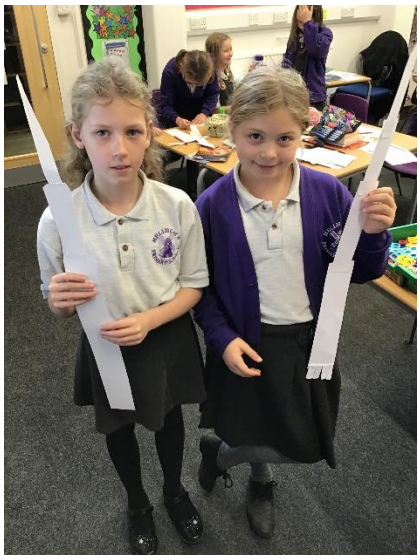
Lower School focussed attention on the 2d and 3d shapes that made up the rockets themselves, with the children constructing representations of the rockets from shapes found in the classroom. This tied in wonderfully well with work the classes were doing on shape and space and it was amazing to see how even the very youngest engineered some fantastic rockets from the resources at their disposal! It was fascinating to see the progression in vocabulary and application through the year groups…one Year 1 pupil explained in detail how the cuboids around the base of his rocket 'made it stable' while by Year 2 pupils were engineering shapes to act as rocket gantries in addition to the rockets themselves!

A flavour of the work…

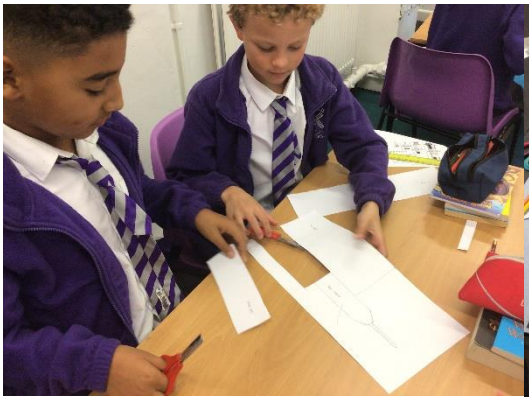
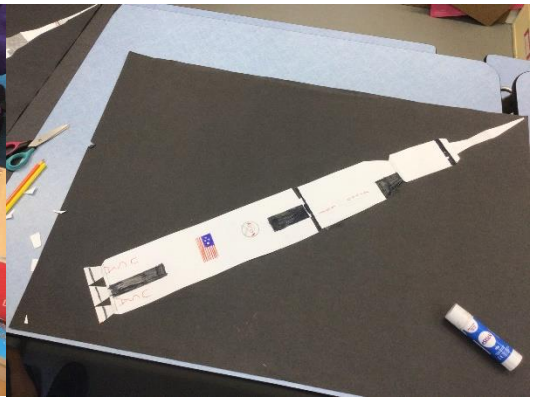
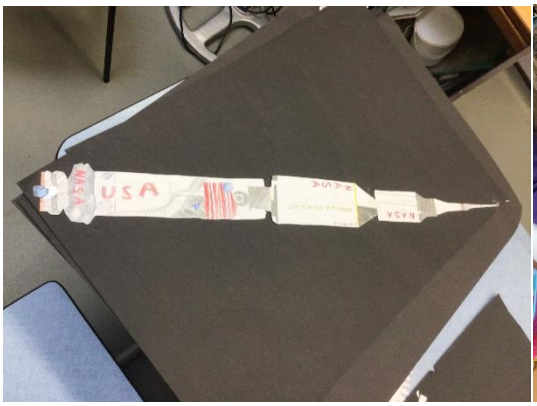
Meanwhile, Lower KS2 practised valuable practical ruler and measuring skills in teams to draw accurately proportioned rocket

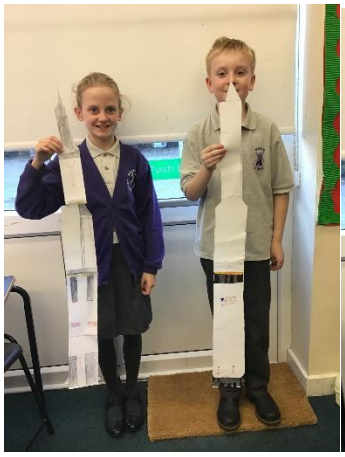
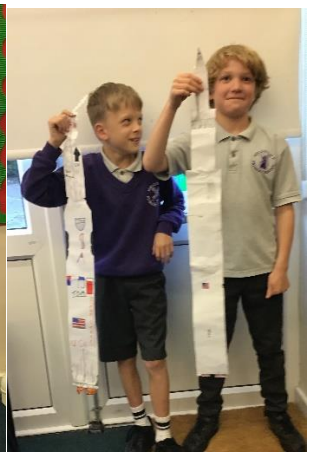
stages, which in turn were added to each other to form complete Apollo mission rockets.





Upper KS2 took this a stage further to draw 1/100 scaled drawings derived from the dimensions of the real thing!

It was excellent to see how a combination of maths, science and the change of attitudes toward the diverse contributers that enabled the success of the Moon missions engaged the children; we reflected at the end that maths doesn't care who is doing it; the numbers tell their own true story and by pooling talents from everyone we can achieve the most remarkable things!

As well as the maths behind it, what also really engaged the children was the social message behind the Hidden Figures film; the importance of diversity and the equality of opportunity. So

much so in fact that it is going to form the basis of future PHSE and writing work moving forward! Learning leads to learning – and all very much well worth doing!