



Maths House Competition: The Results



It is time to announce the winners.....

Radioactive

Words and Music by Daniel Reynolds, Benjamin McKee, Daniel Sermon, Alexander Grant and Josh Mosser

The image shows a page of musical notation for the song "Radioactive". It includes an Intro section with a "Slow" tempo marking and a "Dns+4/A" key signature. The guitar part is written in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. The piano part is written in bass clef. The bass part is written in bass clef with a key signature of one sharp (F#) and a 4/4 time signature. The lyrics for the Verse are: "1. I'm wak - ing up - to ash and dust - I wipe my brow and I sweat my / 2. I raise my flag - and dye my clothes - It's a rev - o - lu - tion I sup - port -".

WINNER Josh H Year 7 Castle

“Maths and Music – The picture illustrate how maths and music are intertwined. In music we use maths and numbers to create rhythm, timing and to keep the beat. A sheet of music is a form of code which Musicians decipher to create a tune. Good Musicians are often good at maths!”



“Time - Units displayed at the door of the HSBC
Shapes - arches, and lots of rectangles from the bricks to the windows.

HSBC is a bank and they display currency conversions on their window, as well as percentages for mortgages.

Some shops have lighted signs, we could calculate the energy costs of lighting them. There’s lots of physics calculations regarding electricity.

Further up the high street, barely visible in the picture is a shop for rent. We could calculate the cost or renting over purchasing the property.

Scale comparing the sizes of different rectangles in the picture.

The arches would need to consider the weight above them.

We could do lots of estimating like

- numbers of people

- crowd density

- busiest shopping times

we could show our results on graphs

- pie charts

- bar charts

Then we could discuss graphs skills like scales, lines of best fit.”

WINNER

Oliver W

Year 7

Priory



WINNER

Izzy D

Year 7

Castle

“The maths:

Ingredients to create the wax melt itself- doubling, halving, fractions and percentages

Wax to fragrance ratios

Time for the wax to melt, graph plotting, mode, median, mean

Angles created in a shadow from light source to shadow on wall (SOHCAHTOA)

Data handling with the smells people prefer or sales for the month from the business that

supply us (www.meltique.co.uk Mum’s friend Sandi)

Shapes in the burner and those that the wax melts come in

Patterns created by the glitter as the wax initially melts

Loss of wax as a % per use

Volume of wax used for different shaped melts

Route planning for company delivery driver

Cost of postage / delivery for the company

Business costs – production, profit”

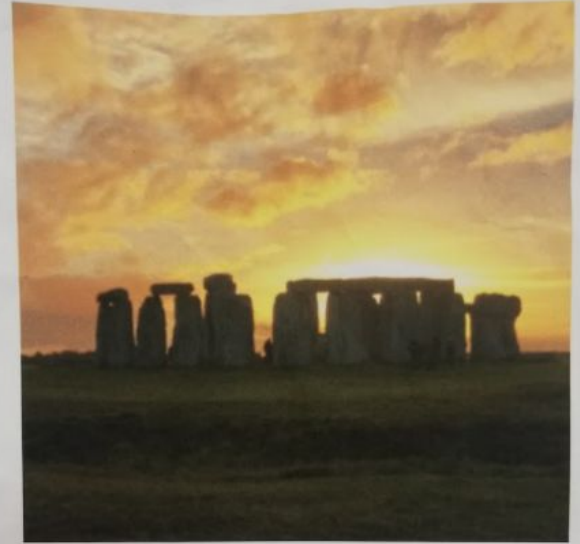
WINNER Sophie T Year 9 Priory

“It shows many ways which time can be represented including dates, years, 12hr and 24hr clock, Roman Numerals, analogue and digital clocks that i have found in my local area.”



WINNER
Megan E
Year 7
Priory

Stonehenge



This is a photo that I took of Stonehenge in the Half Term holiday. Stonehenge had a lot of maths involved in the building of it, including the shape the stones are arranged in and even how many people they could bury there (as some people believe that it used to be a burial ground).

Some Maths Facts:

It is 100 metres in Diameter.

Some stones weigh 30 tonnes (that is 630 of me!)

There are 56 pits know as the Aubrey holes that help up wooden posts.

The tallest stone is 6.5 meters, the shortest 0.5 meters.

WINNER

Callie H

Year 8

Manor

“Has got two circles and one big one small it
has 1 to 12

60 seconds in a minute

different colours

60 minutes in 1-hour

two 30 minutes in 60 minutes

Four 15 minutes 60 minutes”



WINNER

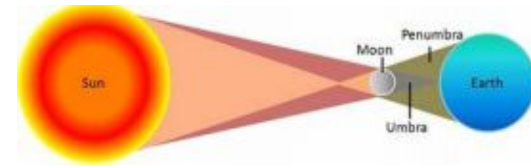
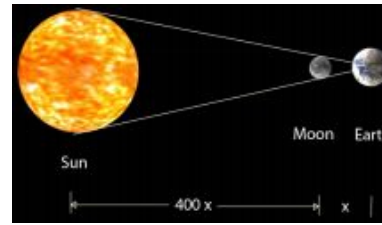
Harrison K

Year 7

Abbey

“A Photograph of an Eclipse I took with my dad in 2015 when I was 7. It was in the middle of the day, we took loads and loads of pictures but only a few came out.

The eclipse works because the Moon is 400 times smaller than the Sun, it's also about 400 times closer to Earth than the Sun is. This means that from Earth, the Moon and the Sun appear to be roughly the same size in the sky and cast a shadow on the Earth.”



WINNER

Amber S

Year 7

Abbey

“The maths in the photo can be:

Number of people

The different shapes e.g rectangle, square

The width/length of the buildings

The numbers/letters on the car plate

Estimating the cm, mm, m of objects

The number of windows for the car/buildings

Numbers on the signs/buses/posters

The m/cm/mm of people standing next to each other

Maths in how objects are made e.g buses need lots of

maths calculations to make it/buildings need to be

measured using maths”



WINNER

Holly S

Year 8

Priory



“My gerbils, Waffle and Jelly’s, cage uses maths because:

- ★ You need to know how long the bars of the cage need to be so it fits the size of the gerbils so they have enough room.
- ★ The food bowl uses maths because you will need to calculate how much food gerbils need so they don't eat too much or don't have enough.
- ★ The gerbils bath bowl needs to be the correct size for them to fit in the bowl and have enough space to have a bath.
- ★ You need to know how far apart the orange and green bars need to be so the gerbil's tiny feet don't fall through or get stuck between the gaps.
- ★ Another way Waffle and Jelly’s cage uses maths is the size of their water bottle. Their water bottle needs to have the correct capacity of water so the gerbils have enough to drink even though they don't drink alot, they still need the right amount of water.”

WINNER

Jimmy F
Year 9
Abbey



“The maths in my photograph:

Shapes

How many rectangular bricks are on the floor?

How many rectangles are on Old Trafford?

How many letters are in the name of the stadium?

What shapes would there be on the Old Trafford pitch?

Estimation

How many people are in the photograph?

How many people visit Old Trafford in a year.... a day..... an hour?

How much money do Manchester United make in a year ... a day.....an hour?

How many blades of grass might there be on the pitch?

Crowds

How many people can Old Trafford hold when it is full?

What is the density of people per m² in the picture?

Time

What time of the day are the matches normally played at?

Can you tell what time it is in the picture from my shadow?

Area

What is the area of the pitch?

Length

How long is the pitch from corner flag to corner flag?”

WINNER

Orla P
Year 7
Abbey



“In this photo (from 2 angles) the hidden maths involved is:

Sizing- mm and cm measurements of the materials and kit.

Aerodynamics- the carbon-air suit is designed to reduce drag through the water and increase efficiency and speed.

Advanced Hydrodynamics- the suit is designed to absorb less water.

Timing and speed- the times of training (early starts and late nights, speed, aerobic, kick and efficiency sets) and also the times for races and pb's. Down to a 100th of a second.

Percentages- the level at which we train determined by the coach and type of set.

Distance- 25m, 50m, 100m, 200m, 400m, 800m, 1500m races. The size of the pools and the distance covered each training session (on average 6km each time).

Shape- body shape, streamline, dives and turns. The shape of the pool.”

Here are all of the entries:

