

Maths

We have been applying our work on percentages with Year 8 and 9 to real life problems.

New york //	
Adult - £520 - 2 people - £1040	
Children - £234 - 2Children - £468	
#12224 1st Week £891180 2nd Week £1508 £1055.60	
£2563.60-Whole neudeug	-
Heman	
Adurt - £687 - 2 people - £1374	
May - 1588.45-21403- 1176.90490	1
Where nouclary - ENVIGUE 2541. 499	
Australia	
Aaut-2805-2 people- £1610	
KICO- £257.60-2 KIGO- £515.20	
1610 + 515.20 = £2125.2 ist week	
#N437872 = 12521.26	
Cheapest = Australia	

The aim of the first activity was to be able to calculate simple interest to find out which bank offers the best deal.

The second activity was a challenge to find which holiday is cheapest for a family

NatWest £5000 Interest = 4.2 % 	Nationwide £6352 Interest = 3.7%	 HSBC (1) £6300 Interest = 4.5%
 3 years BARCLAYS £4500 Interest = 3.2% 4 years 	 4 years Lloyds TSB £3594 Interest = 2.9% 5 years 	 3 years £7,000 Interest = 0.5% 2 years
 £5900 Interest = 4.5% 3 years 	 Santander £6174 Interest = 2.9% 3 years 	Exercise Reserve Bank of Scotland • £6900 Interest = 2.1% • 4 years • 4 years
Natural Interest year = (210) Faterest's years = 210 × 3 New patience = 65000 + =(5630	Nationwide: Interest 1 yea 5 = 030 Interest yea 6030 = New balance	x = 6235 rs = 6940 z = 67292
HSEC: Interest 1 year = E2 Interest 3 years = E8	Borcharys: 33-50 Interest 1 yr 50-50 Interest 4 yr	cor = 8 4 4
New balance = E legels TSB:	715.50 New bolonce Haliyax:	265076
Interest i year i Interest & years i l New baience i l	521 Enterest 2 4115 1 New balance	year: E 30 year: E 70 E : E 7 0 20





Religious Education

As the liturgical season of Advent approaches, students in Key Stage 3 will explore what this seasons means to Christians and examine the common practises and traditions that are observed during the season. It is often thought of as a time of waiting.

Advent – meaning coming – is a period of preparation that counts down to the arrival of Jesus. Students will learn about the 4 Sundays of Advent and how each candle on the Advent wreath expresses great meaning to the life of a Christian. They will also be have the opportunity to consider how they themselves mark the passing of time in their own lives. This will then be compared to the more contemporary ideas of Advent calendars and the important role made confectioners and chocolatiers have played in expressing their faith through their work.

Time is a common theme that is looked at in RE, be that times of specific religious obligations, dates of special festivals or recognising the anniversaries of important religious figures.





One Heart One Mind

Broughton Hall Catholic High School One Heart One Mind

Numeracy in Physical Education – Gymnastics

The aim of the lesson was to investigate how long pupils can hold a balance for and the impact it has on their bodies.

Pupils explored a variety of different balances experimenting with how many seconds they could hold a balance for. Pupils worked in pairs for this activity number 1's held the balance, number 2s would count how many seconds their partner could hold the balance for.

Once pupils held a balance for 5 seconds they worked up in odd numbers for example, once pupils held a balance for 5 seconds, they would progress to 7, 9, 11, 13 and 15 seconds.

Outcome: Pupils understood what impact holding a balance for so many seconds had on their bodies and identified how the lesson related to numeracy in Physical Education.





Calculating prices in Spanish

The aim of this activity is to calculate the price of a room and to book a hotel in Spanish.

Students listen and read to find out prices for a room and meals. After looking at both sets of evidence they should find what each person should pay for their booking.

This will allow students to use numeracy in both languages.

In Spanish we ensure the numeracy rules are used such sums and calculations in £ and Euros.

Lee la página web. Escribe el precio para cada persona.

Ejemplo: **Isa** 95 € + 14 € = 109 €

Isa:Single room, full boardÁgiDavid:Double room, half boardPilaJuan:Double room, breakfast, sea view

Águeda:Single room, full board, sea viewPilar:Single room, breakfast, three nights

Hotel Dos Palomas, Alicante			
Tenemos habitaciones:	on balcón	vistas al mar (suplem	ento 18 €)
	Tipo de habitación	Opciones	Precio por noche
	Habitación individual	con desayuno	79€
		con media pensión*	95€
	Habitación doble • con dos camas	con desayuno	116€
	 con cama de matrimonio 	con media pensión*	Oferta especial 122 €
	* Con pensión completa – suple	mento de 14 €	



Numeracy in History

Judgement Graphs

The aim this activity is to demonstrate that judgements can change over time.

Students make an initial judgement and then are presented with evidence that will change their judgement. After looking at both sets of evidence they should have a more balanced view point.

This will allow students to grasp the need to be cautious of evidence provided to them.

In History we ensure the numeracy rules are used such as labelling the y and x axis.





Geography

	Larg	est Earthquakes		Dea	dliest Earthquakes	3
Year	Location	Magnitude (Richter Scale)	Number of deaths	Location	Magnitude (Richter Scale)	Number of deaths
2012	Sumatra	8.6	No data	Philippines	6.7	113
2011	Japan	9.0	20 896	Japan	9.0	20 896
2010	Chile	8.8	507	Haiti	7.0	316 000
2009	Samoa Islands	8.1	192	Sumatra	7.5	1 117
2008	China	7.9	87 587	China	7.9	87 587
earthqu earthqu many t late the	ake with the highe ake with the highe imes has the larges e mean average of	st magnitude was _ st number of death t earthquake been all the deaths of th	Japan s was <u>Ha</u> the deadlies ne world's de	(a, o) in the interval of the	e year <u>2011</u> e year <u>2010</u> wice (2) ukes. Mean average	tim = <u>85142.</u> 1
			ما م مرالا م		21500-	7





(This is a positive correlation) The graph shows the relationshi between GNI and literacy rate. This is a positive correlation beca the literacy rate goes up and the GNI goes up I think it's b when a country is Rich most people can go to school because the Broughton Hall Catholic High School One Heart One Mind NUMERACY IN PSHE

Financial Capability

ne Heart One Mind

- As part of the whole school PSHE programme Key Stages 3, 4 and 5 are all engaged in lessons that have a focus on developing students' financial capability knowledge and skills.
- During this half term Y11 students have been focusing on developing their knowledge of different types of bank accounts including the importance of having a savings account. They know how important it is to manage their finances through budgeting to enable them to meet all their financial commitments

Mrs Spike's class were extremely engaged with the first lesson on opening a bank account asking lots of interesting questions. They were fascinated by the concept of banks paying interest into savings accounts.

One Y11 student said

"I didn't realise I could have my own bank account now. That's brilliant! I am going to open one at the weekend."



Numeracy in Drama

<u>Focus</u>

In Drama, a number of warm up games that promote focus and concentration are numeracy based.

21: The class stand in a circle facing out so that they can't see each other. Students must count up to 21, only one student can say a number at one time and students must not create a pattern. If two students say a number at one time, or a pattern begins to emerge (e.g. The same students say the same numbers) the class go back to the start.

7's: Students count from 1-7 around the circle tapping the shoulder that matches the direction they want to pass the numbers around in e.g. Tap the left shoulder sends it left, change to right shoulder then the counting changes direction. The students who says '7' must point above their head in the direction they want the new sequence to begin. As classes improve in this game then the counting is done in silence.





Numeracy in Science

Science – As part of the new GCSEs our students are required to carry out required practical's in each discipline. In Physics one of these practical involves measuring the potential difference and current in circuit in order to work out the resistance. Different components are then substituted into the circuit to see how resistance changes. This requite a lot of dexterity and visualisation plus using technology (multi-meters) to record the different values. Finally plotting the values in both positive and negative axes allows the students to put into practice one of the more difficult to understand parts of maths







<u>ICT</u> – As part of their GCSE coursework, pupils had to create a spreadsheet for a movie streaming company which solved various problems. Some of these problems were finding out the total revenue made from different categories, working out the average amount of movies sold and if the target revenue was met after a discount of 10% was applied.

MStreamIT		IIP	2			Category	Price per stream	Total sales	Revenue		
Stream-as-kids-go		A Mt [*]				A - Popular	£2.25	1878	£4,225.50	0	
			1			B - Classics	£1.25	1783	£2,228.75	1	
Target revenue £7,500		ALP.	Į			C - Free	£0.00	1094	£0.00	č.	
						1		Total Rev	£6,454.25		
Movie	✓ Certificate rat ✓	Catego 🛩	Purchases - Month O 🔻	Purchases - Month Ti 💌	Purchases - Month Thr	Total purcha 🗐			2		
Willy Wonka and the Chocolate Factory	PG	В	58	61	71	190		Target	£7,500.00		
E.T.	U	A	42	72	81	195		Target Met	Target not Met	Q)	
Cinderella	U	В	58	41	98	197				6	
Snow White	U	C	74	80	91	245					
Harry Po+A7:A33tter and the Sorcerer's Stone	PG	A	81	89	91	261		Average sa	les for three mon	ths	
ion King, The	U	В	50	77	59	186	i	Category	Average	Rounded	
101 Dalmations	U	C	30	64	66	160		A-Popular	104.3333333	104	1
Alvin and the Chipmunks: Chipwrecked	U	A	24	62	66	152		B-Classics	104.3333333	104	i
Astro Boy	PG	A	97	27	17	141		C-Free	99	99	i
Star Wars	U	В	56	53	30	139					
High School Musical	U	A	25	45	64	134			Disco	unt	
Robots	PG	В	32	39	62	133		Category	Price per stream	Total Sales	Revenue
Princess Bride, The	PG	В	44	54	30	128		A- Popular	£2.03	£2,065.80	
Ice Age 2	U	A	28	58	41	127		B- Classics	£1.13	£1,961.30	
BFG, The	U	С	31	42	43	116		C- Free	£0.00	£1,203.40	£0.0
Mr Incredible	PG	В	36	41	39	116				Total Rev	*****
Mary Poppins	U	C	26	30	57	113				u;	_
Little Rascals	U	A	21	35	55	111		Target	£7,500.00		
Shrek	U	A	32	48	28	108		Target Met	Target not Met	0	
Wizard of Oz, The	U	C	31	38	38	107				ć	
Tarzan	U	С	41	41	20	102					
Madagascar	U	В	30	30	41	101					
Kung Fu Panda 2	PG	A	11	27	61	99					
G-Force	PG	A	18	21	59	98					



Pulse & Rhythm

In Music, it's vital all students have a strong sense of beat (**pulse**) & a good understanding of **rhythm** (the lengths of notes).

We have to keep working hard to identify, internalise & count pulse beats correctly.

We also have to keep practising how long a note should be held on for and ensure we add up rhythmic symbols correctly so that each bar adds up to the correct number of beats (the **time signature**). As we start to use Logic software for composition, our understanding of values & fractions helps us use the piano roll function (which uses a grid to measure note values) & the **quantize** function (which makes our music play perfectly in time).

Scientists believe there are links between musical participation & improvements in mathematical skills. The high-level cognitive functions which develop via playing an instrument support one's ability to achieve in academic subjects such as mathematics.

Numeracy in Music

Notes		Name	Value	
o	Semibreve	Whole note	4 beats	
J	Minim	Half note	2 beats	
	Crotchet	Quarter note	1 beat	
þ	Quaver	Eighth note	% beat	
A	Semi-quaver	Sixteenth note	% beat	
5	2 Quavers	2 Eighth notes	1 beat	
	4 Semi- guavers	4 Sixteenth notes	1 beat	

