

Giffnock Primary School

Curriculum Evening

Wednesday 22nd March 2017



Mental Maths



Key aims for this session:

1. Everyday Maths linked to mental agility
2. Number Talks : a range of strategies
3. Growth mindset : not product but process

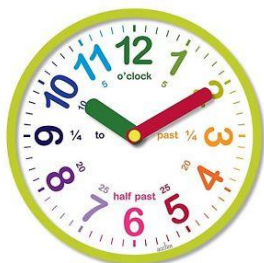


Everyday Maths

Daily mental maths
Manipulation of numbers
Creating a numeracy rich environment



	BBC One	BBC Two	BBC Three
19:00	The One Show	Wimbledon	Top Gear
20:00	EastEnders		
21:00	Britain Beneath Your Feet		Don't Tell the Bride
22:00	MasterChef	Flower Show	Extreme South Africa
	BBC News	Mock the Week	EastEnders



Each grilled burger (94g) contains

Energy	Fat	Saturates	Sugars	Salt
924kJ 220 kcal	13g	5.9g	0.8g	0.7g
11%	19%	30%	<1%	12%

of an adult's reference intake
Typical values (as sold) per 100g: Energy 966kJ / 230kcal





Number Talks

- Looking Outward (St Winnings Primary)
- A range of strategies to support core processing (+, - , x , ÷)
- Equipping children with a range of strategies to solve mental calculations.





Number Talks

Selected Number Talks Strategies

ADDITION

Early	First	Second
Re-ordering $3+6 = 6+3$ Doubles/Near Doubles $5+6 = 5+5+1=11$ $6+6-1=11$	Re-ordering $2+5+8 = 2+8+5$ Doubles/Near Doubles $14+15 = 14+14+1=$ $15+15-1=$ Partitioning $20+38$ $20+30+8$ $50+8$ $=58$	Re-ordering $25+26+75 = 100 +26 =$ Doubles/Near Doubles $18+16= 18+18-2=$ $16+16+2=$ Partitioning $116+127$ $100+100=200$ $10+20=30$ $6+7=13$ $200+30+13=243$ Friendly Numbers $128+147$ $+2 \quad -2$ $130+145=275$



Number Talks

SUBTRACTION

Early	First	Second
Re-ordering $10-2-5=10-5-2=$ Counting back $8-3=$ Counting back in ones	Re-ordering $13-6-3=13-3-6=$ Counting back $28-9=$ $28-8-1=19$ Bridging through 10 $23-8=$ $23-3-5=15$	Re-ordering $86-8-26=86-26-8=$ Counting back $123-69$ ✓ $123-(20+40+3+6)$ $123-20=103$ $103-40=63$ $63-3=60$ $60-6=54$ Bridging through 10/20 $84-27=$ $84-20=64$ $64-4-3=57$ Partitioning $367-154$ $367-100=267$ $267-50=217$ $217-4=213$ $367-100-50-4=213$



Selected Number Talks Strategies

MULTIPLICATION AND DIVISION

Early	First	Second
N/A	Repeated Addition $3 \times 5 =$ $5 + 5 + 5 = 15$ Repeated Subtraction $12 \div 3$ $12 - 3 - 3 - 3 - 3$ $3 \times 4 = 12$ so $12 \div 3 = 4$	Repeated Addition $6 \times 15 =$ $15 + 15 + 15 + 15 + 15 + 15$ $15 + 15 = 30$ $30 + 15 = 45$ $45 + 15 = 60$ $60 + 15 = 75$ $75 + 15 = 90$ Repeated Subtraction $24 \div 6$ $24 - 6 - 6 - 6 - 6$ $6 \times 4 = 24$ so $24 \div 6 = 4$ Partial Products 6×125 $6 \times (100 + 20 + 5)$ $(6 \times 100) + (6 \times 20) + (6 \times 5)$ $600 + 120 + 30 = 750$ Friendly Numbers 9×45 $10 \times 45 = 450$ $450 - 15 = 435$ Don't forget to 'undo' your change!



Growth Mindset

- Process not Product
- Wrong answers are good



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