

# ESSENTIALmaths: Vocabulary Index

**HFL EDUCATION  
PRIMARY MATHS TEACHING AND LEARNING TEAM**

# Index by year group

# Year 1

## Number

### Number: Counting and number properties

number	twenty-one	even
count / counting	twenty-two	pattern
forwards	twenty-three	steps of
backwards	twenty-four	multiple
count on	<i>up to</i>	subitise
countback	ninety-nine	
zero	odd	

### Number: Place value, ordering and comparing

value	first	below
digit	second	middle
same	third	sort
different	fourth	sequence
one / ones	fifth	equivalent
ten / tens	<i>up to</i>	greater than >
hundred	twentieth	less than <
column	order	digit
one-digit	amount	consecutive
two-digit	size	greatest
more / more than	number line	benchmark
less / less than	larger / largest	near / nearer
fewer / fewer than	bigger / biggest	far
equal / equal to / =	smaller / smallest	close to
not equal	estimate	
most	compare	
fewest	between	
least	above	

### Number: Calculation

total / in total	missing number problems	lots of
sum	left / leftover	groups of
plus	part	times
add / addition / +	whole	array
altogether	unknown	regroup / regrouping
combine	number sentence	addend
number bond	equal	subtrahend
difference	equally	minuend
distance between	unequal	bar model
subtract / subtraction / -	pair	remainder
minus	group / grouped	multiple / multiples

## ESSENTIALmaths: Vocabulary index

take away / taken away	grouping
how much	share / shared
how many	sharing
bonds	double / doubling / doubles
start / change/ result	twice as
facts	each
problems	half / halving / halves

### Fractions

half / halve / halves	grouping	numerator
quarter / quarters	part	denominator
one-quarter	whole	fraction notation:
two-quarters	equal parts	$\frac{1}{2}$ $\frac{1}{4}$
three-quarters	same size	
sharing	bar	
group / groups	equal / equally	

### Measurement

#### Measurement: Time

year	May	old / older
month	June	new / newer
week	July	clock / clock face
day	August	o'clock
weekday	September	half past
weekend	October	birthday
chronological order	November	watch
days of the week	December	hour
Monday	night	minute
Tuesday	hour	minutes past / to
Wednesday	minute	quarter past / to
Thursday	second	half past
Friday	morning	fast / faster / fastest
Saturday	afternoon	quick / quicker / quickest
Sunday	evening	slow / slower / slowest
months of the year	yesterday	early
January	today	earlier
February	tomorrow	late
March	before	later
April	after	time

#### Measurement: Mass

weigh	light	ruler
weight	lighter / lighter than	mass
heavy	lightest	gram
heavier / heavier than	balance	kilogram

## ESSENTIALmaths: Vocabulary index

heaviest (weighing) scales

### Measurement: Length

height	wide / wider / widest	far
long / longer / longest	narrow/ narrower/ narrowest	distance
tall / taller / tallest	centimetre	measure
short / shorter / shortest	metre	

### Measurement: Capacity

volume	more than	half
full / fuller / fullest	less than	quarter
empty / emptier / emptiest	half full	capacity

### Measurement: Money

coin / coins	one pence	fifty pence
note / notes	two pence	combination
amount	five pence	money
penny / p	ten pence	
pound / £	twenty pence	

## Geometry

### Geometry: Shape properties

pattern	pyramid / pyramids	base
2-D	cylinder / cylinders	point
rectangle / rectangles	sphere / spheres	diagonal
square / squares	side / sides	pentagon / pentagons
circle / circles	line	hexagon / hexagons
kite / kites	straight	heptagon / heptagons
triangle / triangles	curved	octagon / octagons
3-D	flat	opposite
cube / cubes	open / closed shape	
cuboid / cuboids	corner	

### Geometry: Position and direction

left	on top of	above
right	in front of	below
top	behind	beneath
middle	between	around
bottom		

# Year 2

## Number

### Number: Counting and number properties

numeral	step counting
hundreds	count in multiples

### Number: Place value, ordering and comparing

place value	half-way	digit
partition	three-digit	<i>mid-point</i>
place holder	equivalent	<i>quartile</i>
estimate	greater than >	
estimation	less than <	

### Number: Calculation

commutative	reordering	calculation
inverse	mental method	divide
calculate	written method	remainder
multiplication	reduce	multiple / multiples
division	increase	<i>rebalancing</i>
times tables	combination	<b>product</b>
multiplication table	multiply / multiplied	<b>divisible</b>
repeated addition	fact family	

## Fractions

two-quarters	one and two-quarters	<b>fraction notation:</b>
third	one and a half	
one-third	one and three-quarters	$\frac{1}{3}$ $\frac{2}{4}$ $\frac{3}{4}$
two-thirds	half as much	
equivalent / equivalence	twice as much	
one whole	numerator	
one and a quarter	denominator	

## Measurement

### Measurement: Time

analogue	clockwise	midday
quarter past / to	anticlockwise	midnight
five / ten / past / to	noon	intervals of time

**Measurement: Mass**

gram / g	scale
kilogram / kg	

**Measurement: Length**

height	centimetre / cm	millimetre / mm
width	scale	
metre / m	standard units	

**Measurement: Capacity**

litre / l	scale	three-quarters full
millilitre / ml	quarter full	

**Measurement: Money**

price	amount	value
cost	change	

**Measurement: Temperature**

temperature	Celsius / °C	scale
degrees	thermometer	

**Geometry**

**Geometry: Shape properties**

vertical	hexagon / hexagons	mirror line
horizontal	heptagon / heptagons	properties
Vertex / vertices	octagon / octagons	classify
edge / edges	prism / prisms	opposite
face / faces	cone / cones	regular
quadrilateral / quadrilaterals	symmetry	irregular
polygon / polygons	line of symmetry	
pentagon / pentagons	surface	

**Geometry: Position and direction**

sequence	straight line	north
rotate	arrange	south
rotation	anti-clockwise	east
angle	row	west
right angle	column	compass

**Statistics**

pictogram	key	<i>Carroll diagram</i>
tally chart	sorting	block graph
tallies	totalling	scale
block diagram	comparing	title
table	horizontal	frequent
data	vertical	survey
category / categories	<i>Venn diagram</i>	axis / axes

**Ratio and proportion**

times as many  
for every



# Year 3

## Number

### Number: Counting and number properties

one hundred and one	integer / integers	ascending
one hundred and two	decimal / decimals	descending
one hundred and three	decimal notation	
<i>up to</i>		
one thousand		

### Number: Place value, ordering and comparing

round / rounding / rounded	nearest ten	nearest whole
approximately / $\approx$	nearest hundred	three-digit

### Number: Calculation

column addition	base fact	statements
column subtraction	comparison	derived facts
multiple(s)	long division	formal written layout
inverse operations	correspondence	product
remainder	scaling	divisible
associative law	integer scaling	<i>decomposition</i>
short multiplication	quotient	<i>distributive law</i>

## Fractions

fifths	ninths	non-unit fraction
sixths	tenths	discrete
sevenths	order	continuous
eighths	unit-fraction	

## Measurement

### Measurement: Time

Roman numerals to XII	analogue clock	24-hour clock
am ( <i>ante meridiem</i> )	digital	event
pm ( <i>post meridiem</i> )	digital clock	leap year
duration	12-hour clock	

### Measurement: Length

perimeter	millimetre / mm
length	

## Geometry

### Geometry: Shape properties

orientation  
degree / degrees  
angle  
right angle  
perpendicular  
parallel  
horizontal

vertical  
quadrilateral  
polyhedron  
polyhedral  
acute angle  
obtuse angle  
reflection

orientation  
three-dimensions  
right-angle triangle  
internal angle  
congruent

### Geometry: Position and direction

north  
south  
east  
west

compass

## Statistics

bar chart  
block graph  
scale  
title

interpret  
frequent  
survey  
discrete data

continuous data  
label  
inferring

# Year 4

## Number

### Number: Counting and number properties

thousands	negative numbers
Roman numerals (up to 100 / C)	positive numbers

### Number: Place value, ordering and comparing

nearest thousand	four-digit
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### Number: Calculation

operation / operations methods	factor factor pairs	derive distributive law
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### Fractions

hundredths decimal equivalents decimal places	decimal point proportion convert	proper fractions improper fractions
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## Measurement

### Measurement: Time

convert	conversion
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### Measurement: Length

rectilinear figure area	dimensions kilometre / km
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**Geometry**

**Geometry: Shape properties**

classify	parallelogram / parallelograms	rhombus / rhombuses
nonagon / nonagons	trapezium / trapeziums	geometric shapes
decagon / decagons	protractor	internal angle
isosceles	adjacent	congruent
scalene	regular	
equilateral	irregular	

**Geometry: Position and direction**

co-ordinates	grid	scale
pairs of coordinates/coordinate pairs	translate	label
first quadrant	translation	x-axis
plot	axis / axes	y-axis

**Statistics**

label	x-axis	inferring
graph	y-axis	variable
time graph	line graph	

**Algebra**

variable	rule
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# Year 5

## Number

### Number: Counting and number properties

ten thousand	prime number	cube number
hundred thousand	complement	cube / cubed / $(d)^3$
millions	composite (non-prime)	integer
Roman numerals (up to 1000 / M)	square number	
power / powers of	square / squared / $(d)^2$	

### Number: Place value, ordering and comparing

nearest million	linear sequence
nearest hundred thousand	equivalence

### Number: Calculation

prime factor	short division	<i>dividend</i>
common factor	long multiplication	<i>divisor</i>

## Fractions

mixed numbers	per cent / %
thousandths	percentages

## Measurement

### Measurement: Mass

pound / lb

### Measurement: Length

composite	foot / feet / ft	metre squared ( $m^2$ )
metric units	yard	compound shape
imperial units	mile	
inch / inches / in	centimetre squared ( $cm^2$ )	

### Measurement: Capacity

pint / pt  
centimetres cubed ( $cm^3$ )  
metres cubed ( $m^3$ )

**Geometry**

**Geometry: Shape properties**

diagonal  
point  
reflection  
straight line ( $180^\circ$ )  
one whole turn ( $360^\circ$ )

reflex angle  
regular polygon  
irregular polygon  
angles around a point

missing angle  
diagonal  
**net**

**Geometry: Position and direction**

x-axis

y-axis

**Statistics**

timetables  
two-way tables

axis

**pie chart**

**Ratio**

**per**

**Algebra**

**equation**

# Year 6

## Number

### Number: Counting and number properties

millions  
ten millions

### Number: Place value, ordering and comparing

interval  
multi-digit

### Number: Calculation

long division	brackets	BIDMAS
common multiples	abstract	
order of operations	variables	

## Fractions

simplify  
degrees of accuracy

## Measurement

### Measurement: Mass

stones  
ounces

### Measurement: Length

millimetres cubed ( $\text{mm}^3$ )  
kilometres cubed ( $\text{km}^3$ )

### Measurement: Capacity

millimetres cubed ( $\text{mm}^3$ )	metres cubed ( $\text{m}^3$ )
centimetres cubed ( $\text{cm}^3$ )	gallons

### Measurement: Speed

miles per hour (mph)	metres per second (m/s)	kilometres per hour (km/h)
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**Geometry**

**Geometry: Shape properties**

dissect / dissection	circumference	composite
net	vertically opposite	exterior angle
radius	complementary angles	intersect
diameter	dimensions	

**Geometry: Position and direction**

co-ordinate plane	four quadrants
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**Statistics**

pie chart	data set	conversion graph
mean	variable	convert
average		

**Ratio**

times as many	scale factor	scaling
per	proportion	scale factor
for every	ratio (a:b)	part to part
relative size	comparison	part to whole

**Algebra**

symbol	equation	generalise
letter	unknown	expression
sequence	variable	rule
algebraic / algebraically	constant	combinations



# Index by focus

# Number and place value

Number:					
Number: Counting and number properties					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
number count / counting forwards backwards count on countback zero twenty-one twenty-two twenty-three twenty-four <i>up to</i> ninety-nine odd even pattern steps of multiple subitise	numeral hundreds step counting count in multiples	one hundred and one one hundred and two one hundred and three <i>up to</i> one thousand integer / integers decimal / decimals decimal notation ascending descending	thousands Roman numerals (up to 100 / C) negative numbers positive numbers	ten thousand hundred thousand millions Roman numerals (up to 1000 / M) power / powers of prime number complement composite (non-prime) square number square / squared / (d) <sup>2</sup> cube number cube / cubed / (d) <sup>3</sup> integer	millions ten million

Number: Place value, ordering and comparing					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
value digit same different one / ones ten / tens hundred column one-digit two-digit more / more than less / less than fewer/ fewer than equal / equal to / = not equal most fewest least first second third fourth fifth <i>up to</i> twentieth order amount size	place value partition place holder estimate estimation half-way three-digit equivalent greater than > less than < digit <i>mid-point</i> <i>quartile</i>	round / rounding / rounded approximately / $\approx$ nearest ten nearest hundred nearest whole three-digit	nearest thousand four-digit	nearest million nearest hundred thousand linear sequence equivalence	interval multi-digit

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number line larger / largest bigger / biggest smaller / smallest estimate compare between above below middle sort sequence equivalent greater than > less than < digit <i>consecutive</i> <i>greatest</i> <i>benchmark</i> <i>near / nearer</i> <i>far</i> <i>close to</i>					
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Number: Calculation					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
total / in total sum plus add / addition / + altogether combine number bond difference distance between subtract / subtraction / - minus take away / taken away how much how many bonds start / change/ result facts problems missing number problems left / leftover part whole unknown number sentence equal equally unequal pair	commutative inverse calculate multiplication division times tables multiplication table repeated addition reordering mental method written method reduce increase combination multiply / multiplied fact family calculation divide remainder multiple / multiples <i>rebalancing</i> product divisible	column addition column subtraction multiple(s) inverse operations remainder associative law short multiplication base fact comparison long division correspondence scaling integer scaling quotient statements derived facts formal written layout product divisible <i>decomposition</i> distributive law	operation / operations methods factor factor pairs derive distributive law	prime factor common factor short division long multiplication <i>dividend</i> <i>divisor</i>	long division common multiples order of operations brackets abstract variables BIDMAS

## ESSENTIALmaths: Vocabulary index

group / grouped grouping share / shared sharing double / doubling / doubles twice as each half / halving / halves lots of groups of times array <i>regroup / regrouping</i> <i>addend</i> <i>subtrahend</i> <i>minuend</i> <i>bar model</i> remainder multiple / multiples					
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Fractions:					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
half / halve / halves quarter / quarters one-quarter two-quarters three-quarters sharing group / groups grouping part whole equal parts same size bar numerator denominator equal / equally  fraction notation $\frac{1}{2}$ $\frac{1}{4}$	two-quarters third one-third two-thirds equivalent / equivalence one whole one and a quarter one and two-quarters one and a half one and three-quarters half as much twice as much numerator denominator  fraction notation $\frac{1}{3}$ $\frac{2}{4}$ $\frac{3}{4}$	fifths sixths sevenths eighths ninths tenths order unit-fraction non-unit fraction discrete continuous	hundredths decimal equivalents decimal places decimal point proportion convert proper fractions improper fractions	mixed numbers thousandths per cent / % percentages	simplify degrees of accuracy

Measurement: Time					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
year month week day weekday weekend chronological order days of the week Monday Tuesday Wednesday Thursday Friday Saturday Sunday months of the year January February March April May June July August September October November December	analogue quarter past / to five / ten / past / to clockwise anticlockwise noon midday midnight intervals of time	Roman numerals to XII am ( <i>ante meridiem</i> ) pm ( <i>post meridiem</i> ) duration analogue clock digital digital clock 12-hour clock 24-hour clock event leap year	convert conversion		



## ESSENTIALmaths: Vocabulary index

night hour minute second morning afternoon evening yesterday today tomorrow before after old / older new / newer clock / clock face o'clock half past birthday watch hour minute minutes past / to quarter past / to half past fast / faster / fastest quick / quicker / quickest slow / slower / slowest early earlier late / later time					
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Measurement: Mass					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
weigh weight heavy heavier / heavier than heaviest light lighter / lighter than lightest balance (weighing) scales ruler mass gram Kilogram	kilogram / kg scale			pound / lb	stones ounces
Measurement: Length					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
height long / longer / longest tall / taller / tallest short / shorter / shortest wide / wider / widest narrow / narrower/ narrowest centimetre metre	height width metre / m centimetre / cm scale standard units millimetre / mm	perimeter length millimetre / mm	rectilinear figure area dimensions kilometre / km	composite metric units Imperial units inch / inches / in foot / feet / ft yard mile centimetre squared (cm <sup>2</sup> ) metre squared (m <sup>2</sup> )	

far distance measure				compound shape	
<b>Measurement: Capacity</b>					
<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
volume full / fuller / fullest empty / emptier / emptiest more than less than half full half quarter capacity	litre / l millilitre / ml scale quarter full three-quarters full			pint / pt centimetres cubed (cm <sup>3</sup> ) metres cubed (m <sup>3</sup> )	millimetres cubed (mm <sup>3</sup> ) centimetres cubed (cm <sup>3</sup> ) metres cubed (m <sup>3</sup> ) gallons
<b>Measurement: Money</b>					
<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
coin / coins note / notes amount penny / p pound / £ one penny two pence five pence ten pence twenty pence fifty pence	price cost amount change value				

ESSENTIALmaths: Vocabulary index

combination money					
<b>Measurement: Temperature</b>					
<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
	temperature degrees Celsius / °C thermometer scale				
<b>Measurement: Speed</b>					
<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
					miles per hour (mph) metres per second (m/s) kilometres per hour (km/h)

Geometry: Shape properties					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
pattern 2-D / two-dimensional rectangle / rectangles square / squares circle / circles kite / kites triangle / triangles 3-D / three-dimensional cube / cubes cuboid / cuboids pyramid / pyramids cylinder / cylinders sphere / spheres side / sides line straight curved / flat open / closed shape corner base point diagonal pentagon / pentagons hexagon / hexagons heptagon / heptagons octagon / octagons opposite	vertical horizontal vertex / vertices edge / edges face / faces quadrilateral / quadrilaterals polygon / polygons pentagon / pentagons hexagon / hexagons heptagon / heptagons octagon / octagons prism / prisms cone / cones symmetry line of symmetry surface mirror line properties classify opposite regular irregular	orientation degree / degrees angle right angle perpendicular parallel horizontal vertical quadrilateral polyhedron polyhedral acute angle obtuse angle reflection orientation three-dimensions right-angle triangle internal angle congruent	classify nonagon / nonagons decagon / decagons isosceles scalene equilateral parallelogram / parallelograms trapezium / trapeziums protractor adjacent regular irregular rhombus / rhombuses geometric shapes internal angle congruent	diagonal point reflection straight line (180°) one whole turn (360°) reflex angle regular polygon irregular polygon angles around a point missing angle diagonal net	dissect / dissection net radius diameter circumference vertically opposite complementary angles dimensions composite exterior angle intersect

Geometry: Position and direction					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
left right top middle bottom on top of in front of behind between above below beneath around near close far up down forwards backwards inside outside clockwise repeated position direction movement whole turn	sequence rotate rotation angle right angle straight line arrange anti-clockwise row column north south east west compass	north south east west compass	co-ordinates pairs of coordinates/ coordinate pairs first quadrant plot grid translate translation axis / axes scale label x-axis y-axis	x-axis y-axis	co-ordinate plane four quadrants

## ESSENTIALmaths: Vocabulary index

quarter turn half-turn three-quarter turn full turn underneath to the side next anti-clockwise row column					
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Statistics					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	pictogram tally chart tallies block diagram table data category / categories key sorting totalling comparing horizontal vertical <i>Venn diagram</i> <i>Carroll diagram</i> block graph scale title frequent survey axis / axes	bar chart block graph scale title interpret frequent survey discrete data continuous data label inferring	label graph time graph x-axis y-axis line graph inferring variable	timetables two-way tables axis pie chart	pie chart mean average data set variable conversion graph convert



Ratio and proportion					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	times as many for every			per	times as many per for every relative size scale factor proportion ratio (a:b) comparison scaling scale factor part to part part to whole

Algebra					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			variable rule	equation	symbol letter sequence algebraic / algebraically equation unknown variable constant generalise expression rule combinations