SHERINGDALE

GROWING DREAMS

The New Primary Curriculum

Mathematics

Year 3 Parent/Carer Booklet

Mathematics at Sheringdale encourages each child to have a positive attitude towards and show confidence in their ability to deal with mathematics. Every child is taught to think logically and independently to solve problems by using the appropriate skills, concepts and knowledge. They are provided with rich and enjoyable experiences in mathematics through a creative curriculum and daily maths lessons following the new National Curriculum requirements. Children are encouraged to communicate their ideas, experiences and questions to adults and peers in a clear and fluent way, using appropriate mathematical language.

This booklet aims to give parents information on the new objectives set out for the academic year and ideas for supporting your child at home.

Ask ‘what if…’ questions to extend their thinking

Perseverance

Ask your child to explain their thinking

Collaboration

Reasoning

Questioning

Talk to your child about how you work things

Making Links

Managing Distractions

When faced with a calculation problem, encourage your child to ask...

- Can I do this in my head?
- Could I do this in my head using drawings or jottings to help me?
- Do I need to use a written method?
- Should I use a calculator?

Also help your child to estimate and then check the answer. Encourage them to ask...

Is the answer sensible?

Year 3
Ideas for maths at home with your child:

Eating out
In a restaurant or cafe, ask your child to work out the price of 3 items in pence. How would you write this amount in words? Calculate the total cost of the meal. Can you work out one-tenth (10%) for a tip? Could you talk about fractions over your meal too?

Comparisons
Find some everyday objects and measure their length and mass. Can you do this in mm, cm and m? g and kg?

Out and about
Look for different examples of clocks. Which ones use numbers and which have roman numerals? Read the time from analogue clocks regularly.

Direction maze
Set up an obstacle course with cones, blocks or any containers. Direct a blindfolded person around the course using angles as turns and maths vocabulary such as 'clockwise' and 'quarter-turn'.

Data detective
Collect data about your family or friends. Create a bar chart, pictogram or table to show this data. Are there any surprises? Would it be the same if you repeat the investigation?

Number and Place Value	
1.	count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number
2.	recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
3.	compare and order numbers up to 1000
4.	identify, represent and estimate numbers using different representations
5.	read and write numbers up to 1000 in numerals and in words
6.	solve number problems and practical problems involving these ideas
Addition and Subtraction	
1.	add and subtract a three-digit number and ones mentally
2.	add and subtract a three-digit number and tens mentally
3.	add and subtract a three-digit number and hundreds mentally
4.	add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
5.	estimate the answer to a calculation and use inverse operations to check answers
6.	solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction
Multiplication and Division	
1.	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
2.	write and calculate mathematical statements for x and ÷ using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods
3.	solve word problems, including missing number problems, involving x and ÷.
Fractions	
1.	count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10
2.	recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators
3.	recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators eg. ¼, $^{2}/_{5}$, $^{3}/_{10}$

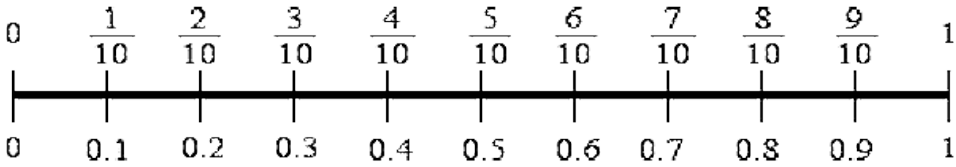
4.	recognise and show, using diagrams, equivalent fractions with small denominators
5.	add and subtract fractions with the same denominator within one whole. For example, 5⁄7 + 1⁄7 = 6⁄7
6.	compare and order unit fractions with the same denominator
7.	solve problems that involve all of the above
	Measurement
1.	measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
2.	measure the perimeter of simple 2-D shapes
3.	add and subtract amounts of money to give change, using both £ and p in practical contexts
4.	tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
5.	estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight
6.	know the number of seconds in a minute and the number of days in each month, year and leap year
7.	compare durations of events [for example to calculate the time taken by particular events or tasks].
	Geometry – properties of shapes
1.	draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
2.	recognise angles as a property of shape or a description of a turn
3.	identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle
4.	identify horizontal and vertical lines and pairs of perpendicular and parallel lines
	Statistics
1.	interpret and present data using bar charts, pictograms and tables
2.	solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables
3.	interpret and present data using bar charts, pictograms and tables

Useful facts and resources

Roman Numerals

I = 1
II = 2
III = 3
IV = 4
V = 5
VI = 6
VII = 7
VIII = 8
IX = 9
X = 10
XI = 11
XII = 12

Number line with tenths



Time

60 seconds in a minute
60 minutes in an hour
24 hours in a day
7 days in a week
12 months in a year
365 days in a normal year
366 days in a leap year

Days in a month rhyme

Thirty days have September,
April, June, and November.
All the rest have 31,
Except February alone,
And that has 28 days clear,
And 29 in a leap year.

Parallel and Perpendicular lines