



Medium Term Planning – Infant 2

Term: Lent 2019

Subject: Mathematics

General Notes

This scheme has been produced with reference to the National Curriculum for Mathematics and the *Primary National Numeracy Framework*.

The lesson content will be taken mainly from Heinemann Mathematics 2 with additional sources used to consolidate where appropriate.

All lessons will include a ten minute mental arithmetic session, but there will also be an additional lesson each Thursday devoted to the development of Mental Maths which will include a Mental Maths test.

Times Tables will be taught on Monday

Homework will be sent home each week to reinforce the mathematical content. It will either be tasks from the Heinemann workbooks, or from the 'Five a Day' textbook, or teacher planned.

Aims

1. To develop a positive attitude towards mathematics.
2. To develop an ability to think clearly and logically in mathematics and with confidence.
3. To improve mathematical skills and knowledge accompanied by quick recall of basic facts.

Objectives

Objectives (Incorporating New National Numeracy framework Learning Objectives)

1. Using and applying mathematics

- Solve problems involving counting, adding, subtracting, doubling or halving in the context of numbers, measures or money, for example to 'pay' and 'give change'
- Describe a puzzle or problem using numbers, practical materials and diagrams; use these to solve the problem and set the solution in the original context
- Answer a question by selecting and using suitable equipment, and sorting information, shapes or objects; display results using tables and pictures
- Describe simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions
- Describe ways of solving puzzles and problems, explaining choices and decisions orally or using pictures

2. Counting and understanding number

- Count reliably at least 20 objects, recognising that when rearranged the number of objects stays the same; estimate a number of objects that can be checked by counting
- Compare and order numbers, using the related vocabulary; use the equals (=) sign
- Read and write numerals from 0 to 20, then beyond; use knowledge of place value to position these numbers on a number track and number line
- Say the number that is 1 more or less than any given number, and 10 more or less for multiples of 10

- Use the vocabulary of halves and quarters in context

3. Knowing and using number facts

- Derive and recall all pairs of numbers with a total of 10 and addition facts for totals to at least 5; work out the corresponding subtraction facts
- Count on or back in ones, twos, fives and tens and use this knowledge to derive the multiples of 2, 5 and 10 to the tenth multiple
- Recall the doubles of all numbers to at least 10

4. Calculating

- Relate addition to counting on; recognise that addition can be done in any order; use practical and informal written methods to support the addition of a one-digit number or a multiple of 10 to a one-digit or two-digit number
- Understand subtraction as 'take away' and find a 'difference' by counting up; use practical and informal written methods to support the subtraction of a one-digit number from a one digit or two-digit number and a multiple of 10 from a two-digit number
- Use the vocabulary related to addition and subtraction and symbols to describe and record addition and subtraction number sentences
- Solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups

5. Geometry – Position and Direction

- Identify objects that turn about a point (e.g. scissors) or about a line (e.g. a door); recognise and make whole, half and quarter turns
- Visualise and use everyday language to describe the position of objects and direction and distance when moving them, for example when placing or moving objects on a game board

6. Measurement

- Estimate, measure, weigh and compare objects, choosing and using suitable uniform non-standard or standard units and measuring instruments (e.g. a lever balance, metre stick or measuring jug). Use language mass/ weight; capacity/ volume.
- Use vocabulary related to time; order days of the week and months; read the time to the hour and half hour

7. Handling data

- Use diagrams to sort objects into groups according to a given criterion; suggest a different criterion for grouping the same objects

Areas of experience

The school will focus on providing experience in the following areas

Linguistic – command of language and ability to communicate grows through listening, speaking, reading and writing.

Mathematical – Understand and appreciate relationships and patterns in number and space and to develop their capacity to think logically and express themselves clearly. Understanding should come from practical activity, exploration and discussion.

Scientific – Knowledge and understanding of nature, materials and forces. Develop skills associated with scientific process of enquiry: observing, forming hypotheses, experiments and recording.

Technological – Planning, developing and evaluating good quality products. Using tools, materials and equipment. Responsible and safe use of computing.

Human and social – People and environment, how human action in the past has influence events and conditions.

Physical – Physical control and co-ordination as well as tactical skills and imaginative responses to evaluate and improve performance. An understanding of fitness and health.

Aesthetic and creative – Making, composing and inventing, present in all areas especially Art, Music, drama, dance, literature.

Scheme of Work/ Weekly Programme of Study

Week 1

Lesson	Content	Workbook/resources
1	No lesson –part week	
2	No lesson – part week	
3	Money – 1p, 2p, 5p, 10p	pages 1, & 2 Workbook 2
4	Money –1p, 2p, 5p, 10p	
5	Times Tables recite 2x tables, write down and learn	

Week 2

Lesson	Content	Workbook/resources
1	Money – 10p	pages 3 and 4
2	Calculating change from 10p	page 5 & 6
3	Calculating change from 10p	Reinforcement 7 & 8
4	2D shape investigation	Shape – page 10
5	Times Tables. Test 10x tables Counting on and back in 5's.	

Week 3

Lesson	Content	Workbook/resources
1	Sequencing and counting numbers to 20.	2- pages 7 & 8
2	Sequencing and counting numbers to 20.	2- pages 9 & 10
3	Number names to 20.	2- pages 11 & 12
4	Right angles	Shape- pages 11 & 12
5	Times Tables recite 5x tables, write down and learn	

Week 4

Lesson	Content	Workbook/resources
1	Number names to 20	
2	Position and following instructions with a bebot	
3	Directions – left and right turns/ forwards, backwards	
4	Right angle turn	Shape- pages 13 & 14
5	Times Tables	

Week 5

Lesson	Content	Workbook/resources
1	Place value to 20.	2 – pages 13 & 14
2	Place value to 20.	2 – pages 15 & 16
3	Place value to 20	2 – pages 17 & 18
4	Place value to 20	
5	Times Tables. Test 5x tables	

Week 6

Lesson	Content	Workbook/resources
1	Concept of area and shape puzzles.	Measure – page 10 Problem Solving 2 – Shape puzzles
2	Area – non-standard units	Measure – page 11 Contexts – Islands 1 d
3	Area- non-standard units	Measure – page 12 Contexts – Islands 1d
4	Area – Animal Puzzles	
5	Times Tables	

Half Term**Week 7**

Lesson	Content	Workbook/resources
1	Counting on – on a number line	2- page 19, 20
2	Complementary addition/ difference between	Pages 21, 22
3	Trip to Motor museum	
4	Complementary addition/ difference between	Pages 23
5	Times Tables test 2x 2	

Week 8

Lesson	Content	Workbook/resources
1	Days of the Week	Measure – page 17 & 18
2	Months of the Year & Seasons	Measure – page 16
3	Time o'clock and half past	Measure 13, 14
4	Check work on time – o'clock and half past.	
5	Times Tables	

Week 9

Lesson	Content	Workbook/resources
1	Time – digital displays	
2		Measure – page 15
3	Time – analogue and digital clocks	
4	Time	
5	Times Tables, 2, 5 and 10 x	

Week 10

Lesson	Content	Workbook/resources
1	Teen numbers	
2	Estimation to 20 & number sequence to 50.	3 – pages 1 & 2
3	Numbers from 50 to 100	3 – pages 3 & 4
4	Numbers from 50- 100.	
5	Times Tables	

Week 11

Lesson	Content	Workbook/resources
1	Number sequence to 100.	3 – pages 5 & 6
2	Number doubles and near doubles.	
3	Assessment workbook 2 check up	
4	Revision of 2d shape Multiplication – 2, 5 and 10 times tables	

Week 12

Lesson	Content	Workbook/resources
1	Word problems linked to 2, 5, 10 times tables	
2	Revision of 3D shape	
3	Consolidation	
4	Multiplication – 2, 5 and 10 times tables	

Mental Maths – On a Thursday there will be a mental maths test & consolidation of concepts taught during lessons 1,2 ,3 the previous week.

Times tables 2, 5 and 10 will be taught on a Monday.

Differentiation

Activities will be differentiated to meet the differing needs of the children. These will be recorded on the lesson plans. The children will be grouped according to their mathematical ability. Each lesson will include support materials and extension activities. Extension activities for the MA and G& T will be highlighted on each individual lesson plan.

Cross Curricular Links

Links with other subjects will be made wherever possible. The Humanities topic this term is 'Toys' therefore activities and problem solving will include shopping activities. Maths will also be used in other curriculum areas such as Science, Art and Design Technology.

Deployment of Teaching Assistants

The Teaching assistant will support children according to their needs and abilities. Specific details of the role of the Teaching Assistant during each lesson will be outlined on the lesson plan.

Resources

The children will be using the Heinemann Maths workbooks including the extension books and the work cards. Other resources may include 100 squares, number cards (HM and SPMG) dominoes, shopping games and puzzles, clocks and time activities, number lines, times tables posters, and counters etc. but specific details regarding resources will be listed in the short term plans (lesson plans).