Example Scheme of Work – MKSHK Year 2 Maths

Teacher		**Pre-Prep**	**2**	**Year**	**2**	**No of pupils**		**Subject**	Maths
Term								**No. of lessons**	5
About this Unit	**Strands:** Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP)								
Summary	**Strands:** Mental multiplication and division (MMD); Fractions, ratio and proportion (FRP) **Week summary:** Revise doubles and corresponding halves to 15; find half of odd and even numbers to 30; Revise and recognise 1/2s, 1/4s, 1/3s and 2/3s of shapes; place 1/2s on a number line; count in 1/2s and 1/4s; understand and write mixed numbers								

	Main Focus	Starter	Teaching Summary	Task Descriptions	Outcomes
1	**Lesson** Revise doubles to double 15 and corresponding halves	**ST 2.16.1**Use fingers to model doubles to double 5. Call out a number, chn show the double on their fingers. Rpt.	• Show a coat hanger with six pegs on each side. Agree how many there are and write *6 + 6 = 12* and *double 6 is 12* . Rpt with double 7. • Find half of 14, reminding chn that it is the opposite of doubling. Rpt with doubling 8, 9 and 10. • Chn make two towers of either 11, 12, 13, 14 or 15 with ten cubes in one colour and the rest in another. Use to model partitioning and doubling. • Chn choose a number, and explain how it is partitioned, e.g. *Fourteen is ten and four.* They double and say the total. • Call out doubling and halving questions that chn can answer using their fingers.	**Core: (T) Gui 2.16.1** Chn throw bean bags onto a numbered dartboard, doubling the number they land on. Rpt with larger numbers and halving. **Core:** Y2 WB2 p35 **Support: IP 2.16.1a** Chn find all the double dominoes in a set and write the corresponding doubles and halves. **Extend: IP 2.16.1b** Chn use Resource sheet 595 to play a halving game for 2-4 players.	Children can: • double numbers to 15 and find corresponding halves.
Objectives: MMD.19 Double numbers to 12 and find related halves; **MMD.21** Double numbers to 20, including partitioning teen numbers, and find related halves **Key Vocabulary:** double; halve; partition; tens; units; altogether; total					

Physical Resources: 1–6 dice; 10p and 1p coins; 20 pegs; A1 paper; bean bag; coat hanger; counters; dominoes (black and white); interlocking cubes; Y2 Workbook 2; **Photocopiables:** Resource sheet 595; **Digital Resources:** Lesson: Year 2					
2	**Lesson** Find half of even numbers to 30, and revise finding half of an odd number	**ST 2.16.2**Point randomly to a number 1–10 and say its double. Chn show thumbs up if you are right, and down if you are wrong. Rpt.	• Make a stick of 16 cubes using one colour to make 10, and another to make the remaining 6. Explain and model how to halve by partitioning. Write *Half of 16 is 8.* In pairs, chn halve 18. • Rpt for 15 and agree that 5 cannot be halved. Demonstrate how they would be able to share 15 sausages by cutting one in half. Write half of 15 = 7 and a half. Reference 5 being an odd number. • Chn make 24 using place-value cards (Resource sheets 22 and 24a). As a class, partition and find out half of each number. Discuss the answer and write: *half of 24 = 12.* • Show Screen 2.16.2 and explain that everything is half price. Chn make the amounts using 10p and 1p coins and find the sale price.	**Core: (T) PSR.C 2.16.2** Chn investigate which numbers 10–30 can be halved to give whole numbers. Use cubes and place-value cards (Resource sheets 2 and 24a). Encourage chn to spot patterns. **Support: (T) PSR.S 2.16.2** Chn investigate which numbers 10–30 can be halved to give whole numbers. Use cubes and place-value cards (Resource sheets 2 and 24a). Encourage chn to spot patterns. **Extend: (T) PSR.E 2.16.2** Chn investigate which numbers 10–30 can be halved. Use cubes and place-value cards (Resource sheets 2 and 24a). Encourage chn to spot patterns. Extend the investigation to bigger numbers.	Children can: • halve even numbers to 30 • recognise odd and even numbers to 30.
Objectives: MMD.36 Double and halve numbers to 100, including partitioning 2-digit numbers; **FRP.20** Find 1/2 of odd numbers **Key Vocabulary:** double; halve; partition; tens; units; altogether; total **Physical Resources:** 10p and 1p coins; flipchart; interlocking cubes; label cards; two hoops; **Photocopiables:** Resource Sheet 596; RS 2 Number cards 0-20; RS 108 Number cards 21-40; **Digital Resources:** Lesson: Year 2; Number square tool 2.16.2; Screen 2.16.2					
3	**Lesson** Revise halves and quarters of shapes, and recognise one-third and two-thirds of shapes	**ST 2.16.3**Chn choose a number of fingers to show. Select a card from 2-20 (Resource sheet 2). If any child has half the selected number, they win a counter.	• Show chn a piece of A4 paper and fold in half. Write *1/2* on each part. Rpt folding a sheet into quarters. Ask chn to fold a square into quarters. Show a square folded diagonally in half. Chn experiment with different ways of folding a square into quarters. • Model folding paper unequally and discuss how it isn't folded in half. Rpt folding into 4 unequal parts. • Chn say the fractions coloured red on the flag designs on Screen 2.16.3. Look at the	**Core: IP 2.16.3** Chn colour flags on Resource sheet 597 in different ways and label the fraction in each colour. **Support:** Y2 WB2 p36 **Extend: (T) Gui 2.16.3** Chn choose number cards 10-20 (Resource sheet 2) and investigate which they can half and quarter into whole numbers. Rpt for thirds.	Children can: • recognise, read and write 1/2, 1/4, 3/4, 1/3 and 2/3.

			next slide and compare flags and the fractions coloured red and yellow.		
Objectives: FRP.12 Understand that a fraction is an equal part of a whole; 1/2s and 1/4s of shapes; **FRP.23** Understand the concept of a unit fraction; 1/2, 1/3, 1/4, 1/8 **Key Vocabulary:** half; quarter; equal; unequal; three-quarters; third; two-thirds; altogether **Physical Resources:** bread or modelling dough sandwiches; coloured pencils; counters; four plates; four teddies; interlocking cubes; paper squares; pieces of A4 paper; squared paper; Y2 Workbook 2; **Photocopiables:** RS 2 Number cards 0-20; RS 597 Fraction flags; **Digital Resources:** FE 2.16.3; Lesson: Year 2; Screen 2.16.3					
4	**Lesson** Place halves on a number line, and begin to understand mixed numbers	**ST 2.16.4**Chn count along the washing line (Resource sheets 77–96) whispering the odd numbers. Rpt, whispering the even numbers.	• Discuss sharing 3 sandwiches between two chn and draw out that they will have 1 1/2 each. Explain that this is a mixed number — a whole number and a fraction. • In pairs, chn fold strips of 5 or 7 sandwiches (Resource sheet 599) in half to find out how many each would get. Take feedback and write answer. • Using Screen 2.16.4, discuss how many leaves Katrina ate each day. Discuss where to put this number on the number line. Chn mark each number of leaves on the number line. • *On which day did Katrina eat most leaves? On which day did she eat fewest?*	**Core:** Y2 WB2 p37 **Support: (T) Gui 2.16.4** Work together to share 5 biscuits, 3 rice cakes and 7 bread sticks between two, labelling fractions each time. Chn fold strips of objects (Resource sheet 600) in half. Order and label. **Extend: IP 2.16.4** Chn order groups of sandwiches from (Resource sheet 601), write the mixed number and mark on a number line.	Children can: • understand mixed numbers and place halves on a number line.
Objectives: FRP.27 Place 1/2s and 1/4s on a number line **Key Vocabulary:** share; half; mixed number; whole number; fraction; most; fewest **Physical Resources:** 3, 5 and 7 items of food that can be halved; 20 pegs; flipchart; plates; sticky notes; three sandwiches; washing line; Y2 Workbook 2; **Photocopiables:** Resource Sheet 599; Resource Sheet 601; **Digital Resources:** Lesson: Year 2; Screen 2.16.4					
5	**Lesson** Count in halves and quarters and write mixed numbers	**ST 2.16.5**Play 'Team counting' in 2s to 30 and back again.	• Using Screen 2.16.5 discuss how many sandwiches have been eaten if 3 halves have been eaten and so on. Count the sandwiches in halves. • Rpt for quarters on the next slide, drawing out that 2/4 is 1/2. Count in quarters up to 4. • Ask a child to mark 1/2 on the 0-5 number line (Number line tool 2.16.5). 1 1/2 and so on. Count in halves. Rpt, adding the quarters.	**Core: (T) Gui 2.16.5** Chn match fractions cards (numbers and pictures on Resource sheets 602/603) then order them. Count along in steps of 1/4 and continue after they've finished counting the cards. **Core:** Y2 WB2 p39 **Support:** Y2 WB2 p38 **Extend: IP 2.16.5** Chn match fractions cards (numbers and pictures on Resource sheets 602/603) then order them. Count along in steps of 1/4 and	Children can: • count in steps of 1/2 and 1/4 (without necessarily using the equivalence between halves and quarters).

				continue after they've finished counting the cards.	

Objectives: FRP.19 Count in halves beyond 1 to 10; **FRP.21** Count in 1/4s beyond 1, not saying equivalent fractions

Key Vocabulary: half; quarter; three-quarters; altogether; whole

Physical Resources: cardboard circle cut into four unequal pieces; four teddies; paper strips; Y2 Workbook 2; **Photocopiables:** Resource Sheet 602; Resource Sheet 603; Resource Sheet 604; **Digital Resources:** Lesson: Year 2; Number line tool 2.16.5; Screen 2.16.5