Key Learning in Mathematics – Reception

Number - counting Number - number sense Measurement • Partition a set of objects in different ways using the terminology part -Distance Rote counting part - whole • Understand that measures of distance can have different names Rote count from 1 • Rote count on from a given number between 1 and 20 • Explore and represent the patterns in odd and even numbers including length, width, height • Rote count back from 20 to 0 • Understand that 'teen' numbers are a group of 10 plus another • Understand and use language to compare the length/width of two • Rote count back from a given number between 0 and 20 number • Know what number comes before or after a given number • Understand 20 is the same as two groups of 10 Understand and use language to compare the height of two objects • Say a number between two given numbers • Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 • Understand and use language of comparison when ordering three Rote count beyond 20 and 16, 17, 18, 19 and 26, 27, 28, 29 etc. objects of different lengths/widths/heights Understand the concept of the conservation of length/width/height **Number - number recognition Counting objects** Recognise and identify numerals 0 to 20 Understand that counting is to find out how many Weight/mass • Select the numeral that represents a set of objects • Use one to one correspondence when counting Understand the measurement of weight/mass (heavy/light) • Order numerals 0 to 20 • Understand the last number said is the number in the set Understand and use language to compare the weight/mass of two • Count up to 20 objects, pictures, sounds and actions Understand and use conservation of number Understand the concept of conservation of weight/mass **Number – graphics** • Use the word 'zero' to represent 'none' • Represent amounts in their own ways, explaining what they mean • Compare two sets of different objects saying which set is more, Volume/capacity • Represent and explain their thinking in their own ways greater, fewer, less, same, equal Understand the measurement of volume/capacity (empty/full/nearly) • Write numerals 0 to 20 • Understand and use language to compare two of the same container • Order three or more sets of objects • State without counting (subitise) quantities within 5 holding different amounts • Make a sensible guess of quantities within 10 Understand and use the language of comparison when ordering three of the same container holding different amounts Number - calculating Understand the concept of the conservation of volume/capacity • Understand the concept of addition by practically combining sets of • Know that shapes can appear in different ways and be different sizes objects to find how many and use the terminology part – part – whole • Build and make models with 3-D shapes Money • Understand the concept of subtraction by practically removing one • Create and describe pictures using 2-D shapes • Understand that we need to pay for goods • Name common 2-D shapes (circle, triangle, square rectangle, oblong amount from within another to find how many are left and use the • Talk about things they want to spend their money on terminology part - part - whole rectanale) • Talk about different ways we can pay for things • Relate subtraction to addition in practical situations using the • Name common 3-D shapes (sphere, cube, cuboid) • Recognise that there are different coins • Talk about shapes using mathematical language (straight, curved, terminology part - part - whole Recognise 1p coin • Identify one more and one less than a given number sides, flat, solid) • Use 1p coins to pay for objects • Identify two more and two less than a given number • Sort shapes according to their own criteria • Add two single-digit numbers totalling up to 10, using practical **Space** Time equipment • Understand and use positional language in everyday situations • Talk about significant times of the day, e.g. home time, lunch time, • Add two single-digit numbers totalling greater than 10, using practical • Understand and use ordinal numbers when describing position snack time, bed time, etc. • Understand and use the language of movement/direction • Understand and use language – before, after, yesterday, today, • Subtract a single-digit number from a number up to 10, using • Describe and recognise patterns made of objects, numbers and shapes practical equipment. • Create patterns made of objects, numbers and shapes Use the language of comparison when talking about time, e.g. longer/ • Subtract a single-digit number from a number greater than 10, using shorter: faster/slower practical equipment • Sequence two or three familiar events and describe the sequence • Automatically recall addition and subtraction facts up to 5 and some • Know the names of the days of the week addition and subtraction facts to 10 Say the names of the days of the week in order **Number - fractions Statistics** • Understand that sharing is splitting an amount into equal parts • Sort objects and say what features they have in common • Understand that halving is sharing into two equal parts • Understand that doubling is adding the same number to itself Automatically recall double facts to double 5