







### Reception

# **Mathematics - Autumn Term**

### **Knowledge and Skills**

To subitise.

To count objects, actions and sounds. To link the number symbol (numeral) with its cardinal number value.

To compare numbers.

To explore the composition of numbers to 10. -(0-5) To understand the 'one more than/ one less than' relationship between consecutive numbers.

### **Knowledge and Skills**

To compare length, weight and capacity. To continue copy and create repeating patterns. To select, rotate and manipulate shapes to develop spatial reasoning skills. 2D shapes

To compose and decompose shapes so that children recognise a shape can have other

### **Opportunities**

I do, We do, You do approach to learning

Widgit Symbols to support introducing new vocabulary.

**Concrete resources** (Taken from calculation policy) - counters, natural objects, pictures of collections of amounts, 5 frame, 10 frame, numicon, number track, counting stick. Numerals, dominoes, dot arrangements, Fingers.

Sentence stems - to promote high quality reasoning.

**Enabling environment-** Opportunity to apply mathematical skills and thinking through resources in the provision, Adult modelling and high quality questioning to extend learning. rhymes and books to promote mathematical thinking.





#### Vocabulary

Sort, match, compare, same, different, set, group, explore, identify, sorting rule.

Count, notice, group, set, how many altogether?,1-5 subitise, What do you see, what do you notice? represent. touch count, one to one correspondence, cardinality, stable order principle, abstraction principle, order irrelevance principle.

1 more than, count on, add, after, 1 less than, count back. subtract, take away, before. make, composition, arrange, rearrange.

#### Vocabulary

Compare, measure, size, big, small, bigger, smaller, biggest, smallest, tall, short, taller, shorter, tallest, shortest. mass, heavy, light, heavier, lighter, heaviest, lightest weigh, same, balance, scale

Capacity, more, less, same, most, least, container, full, empty, Pattern, see, hear, notice, make, repeat, alternate, copy, continue, next, explain, describe.

Shape, circles, triangles, square, rectangle, same, different, pointy, sharp, sides, straight, curves, corners, round, flat shape, 2 **Dimensional 2D** 

Positional language in, on, under, over, beside, between, infront, around, through, behind, describe, position, move, route.

### Reception

# **Mathematics - Autumn Term**

#### **Knowledge and Skills**

To subitise.

To count objects, actions and sounds.

To link the number symbol (numeral) with its cardinal number value.

To compare numbers.

To explore the composition of numbers to 10.

To understand the 'one more than/ one less than' relationship between consecutive numbers.

To automatically recall number bonds for numbers 0-5 and some 0-10.

### **Knowledge and Skills**

To compare length, weight and capacity. To continue copy and create repeating patterns. To select, rotate and manipulate shapes to develop spatial reasoning skills. 3D shapes To compose and decompose shapes so that children

recognise a shape can have other

To understand sequences (time)

### **Opportunities**

I do, We do, You do approach to learning

Widgit Symbols to support introducing new vocabulary.

**Concrete resources** (Taken from calculation policy) - counters, natural objects, pictures of collections of amounts, 5 frame, 10 frame, numicon, number track, counting stick. Numerals, dominoes, dot arrangements, Fingers.

Sentence stems - to promote high quality reasoning.

**Enabling environment-** Opportunity to apply mathematical skills and thinking through play with resources in the provision, Adult modelling and high quality questioning to extend learning. rhymes and books to promote mathematical thinking.



#### Vocabulary

Count, notice, group, set, how many altogether?,0-10 Conceptual subitising - parts, what do you see, how do you see it? part, whole.

1 more than, count on, add, after, 1 less than. count back, subtract, take away, before. make, composition, arrange, rearrange. combine, altogether,

odd, even, pair, two, arrange, notice, one left, matching, sorting, equal, unequal

**Double** twice as many, pattern, arrangements

Combine two groups- add, plus, total, equals, combine, group, altogether,

#### Vocabulary

Compare, measure, size, big, small, bigger, smaller, biggest, smallest, tall, short, taller, shorter, tallest, shortest. Not long, not short mass, heavy, light, heavier, lighter, heaviest, lightest weigh, same, balance, scale, weight

Capacity, more, less, same, most, least, container, full, empty, tall, thin, narrow, wide, shallow.

Pattern, see, hear, notice, make, repeat, alternate, copy, continue, next, explain, describe, pattern rule

Shape, 3D 3 Dimensional, cube, cuboids, cylinders, pyramids, cone, Solid object, shape, sort, same, different, flat face, curved face, 2D fit together, move apart.

Positional language in, on, under, over, beside, between, Infront, around, through, behind, describe, position, move, route.

Time - Sequencing first, then, next, finally, before, after, daytime, night time, lunchtime, bedtime, order, sequence

### Reception

# **Mathematics - Summer Term**

#### **Knowledge and Skills**

To subitise.

To count objects, actions and sounds.

To link the number symbol (numeral) with its cardinal number value. To compare numbers.

To explore the composition of numbers to 10.

To understand the 'one more than/ one less than' relationship between consecutive numbers.

To automatically recall number bonds for numbers 0-5 and some 0-10.

To count beyond 10

### **Knowledge and Skills**

To compare length, weight and capacity. To continue copy and create repeating patterns. To select, rotate and manipulate shapes to develop spatial reasoning skills. 3D shapes

To compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.

### **Opportunities**

I do, We do, You do approach to learning

Widgit Symbols to support introducing new vocabulary.

**Concrete resources** (Taken from calculation policy) - counters, natural objects, pictures of collections of amounts, 5 frame, 10 frame, numicon, number track, counting stick. Numerals, dominoes, dot arrangements, Fingers.

Sentence stems - to promote high quality reasoning.

**Enabling environment-** Opportunity to apply mathematical skills and thinking through play with resources in the provision, Adult modelling and high quality questioning to extend learning. rhymes and books to promote mathematical thinking.





#### Vocabulary

,Add 1 more than, count on after, 1 less than. count back, Subtract, take away, before. make, composition, arrange, rearrange. combine, altogether, odd, even, pair, two, arrange, notice, one left, matching, sorting, equal, unequal **Double** twice as many, pattern, arrangements Combine two groups- add, plus, total, equals, combine, group, altogether, Sharing - Equal, unequal, group, share, how many, fair, unfair, left over

#### **Vocabulary**

Compose and decompose shape, 2D circle, triangle, square, rectangle. 3D, cuboid, cube, cylinder, cone, pyramid. rotate, manipulate, arrange, compose, decompose, slot together, join. map, build, instruct, represent, describe,

Positional language in, on, under, over, beside, between, Infront, around, through, behind, describe, position, move, route. Pattern, see, hear, notice, make, repeat, alternate, copy, continue, next, explain, describe, pattern rule

# Reception End Point

# Mathematics - Early Learning Goal

#### Number

Children at the expected level of development will:

Have a deep understanding of numbers to 10, including the composition of each number.

Subitise (recognise quantities without counting) up to 5.

Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts. Children at the expected level of development will:

Verbally count bey counting system.

Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.

Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.



#### **Numerical Patterns**

Verbally count beyond 20, recognising the pattern of the