



Fairfields Primary School
Mathematics

Essential Number Skills

(September 2018)

The skills introduced in previous years have a grey background.
New skills to be mastered by the end of each year have a white background.

EYFS Essential Number Skills

FACTS

say the days of the week in order

COUNTING

count forwards to 100 in unison with other children

count backwards from 20

know the next number for any number up to 12 e.g., eight,

match one-to-one in counting

match numbers to fingers e.g., hold up 7 fingers (without counting)

subitise numbers up to and including 6 e.g., do children recognise arrays, 6 dots on a dice without counting?

COMPARING NUMBERS

begin to compare numbers e.g, know that 6 is bigger than 4

compare the size of things using mathematical language e.g., Tom is taller than me

NUMBER BONDS

know the story of 6 (3+3, 2+4 1+5, 6+0), and the stories of 5 and of 4 and of 3.....

Year 1 Essential Number Skills

FACTS

know there are 7 days in a week, say the days of the week in order

know there are 12 months in a year, say the months of the year in order

COUNTING

count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens

given a number, identify one more and one less

use the language of: equal to, more than, less than (fewer), most, least

identify and represent numbers using objects and pictorial representations including the number line

NUMBER BONDS

represent and use number bonds and related subtraction facts within 20

MENTAL CALCULATION

add and subtract one-digit and two-digit numbers to 20, including zero

read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

Year 2 Essential Number Skills

FACTS

know there are 7 days in a week, say the days of the week in order

know there are 12 months in a year, say the months of the year in order

know how many days in each of the months of the year e.g, through rhyme "thirty days hath September, April, June and November"

know there are 60 seconds in 1 minute, 60 minutes in 1 hour

Know there are 24 hours in 1 day, know there are 52 weeks in 1 year

COUNTING

count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

count, read and write numbers to 100 in numerals

count in multiples of twos, fives and tens

given a number, identify one more and one less

use the language of: equal to, more than, less than (fewer), most, least

identify and represent numbers using objects and pictorial representations including the number line

count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

COMPARING NUMBERS

compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs

READING AND WRITING NUMBERS

read and write numbers to at least 100 in numerals and in words

UNDERSTANDING PLACE VALUE

recognise the place value of each digit in a two-digit number (tens, ones)

NUMBER BONDS

represent and use number bonds and related subtraction facts within 20

recall and use addition and subtraction facts to 20 fluently

and derive and use related facts up to 100

MENTAL CALCULATION

add and subtract one-digit and two-digit numbers to 20, including zero

read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

add and subtract numbers using concrete objects, pictorial representations, and mentally, including: *

a two-digit number and ones

* a two-digit number and tens

* two two-digit numbers

* adding three one-digit numbers

MULTIPLICATION AND DIVISION FACTS

recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognizing odd and even numbers

Year 3 Essential Number Skills

FACTS

know there are 7 days in a week, say the days of the week in order

know there are 12 months in a year, say the months of the year in order

know how many days in each of the months of the year e.g, through rhyme “thirty days hath September, April, June and November”

know there are 60 seconds in 1 minute, 60 minutes in 1 hour

Know there are 24 hours in 1 day, 52 weeks in 1 year, 365 days in 1 year

COUNTING

count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

count, read and write numbers to 100 in numerals

count in multiples of twos, fives and tens

given a number, identify one more and one less

use the language of: equal to, more than, less than (fewer), most, least

identify and represent numbers using objects and pictorial representations including the number line

count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

count from 0 in multiples of 4, 8, 50 and 100

find 10 or 100 more or less than a given number

COMPARING NUMBERS

compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs

compare and order numbers up to 1 000

READING AND WRITING NUMBERS

read and write numbers to at least 100 in numerals and in words

read and write numbers up to 1 000 in numerals and in words

tell and write the time from an analogue clock, including 12-hour and 24-hour clocks

UNDERSTANDING PLACE VALUE

recognise the place value of each digit in a two-digit number (tens, ones)

recognise the place value of each digit in a three-digit number (hundreds, tens, ones)

NUMBER BONDS

represent and use number bonds and related subtraction facts within 20

recall and use addition and subtraction facts to 20 fluently

derive and use related facts up to 100

MENTAL CALCULATION

add and subtract one-digit and two-digit numbers to 20, including zero

read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

add and subtract numbers using concrete objects, pictorial representations, and mentally, including: *

a two-digit number and ones

* a two-digit number and tens

* two two-digit numbers

* adding three one-digit numbers

add and subtract numbers mentally, including:

* a three-digit number and ones

* a three-digit number and tens

* a three-digit number and hundreds

MULTIPLICATION AND DIVISION FACTS

recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

write and calculate mathematical statements for multiplication and division using the multiplication tables that they know

Year 4 Essential Number Skills

FACTS

know there are 7 days in a week, say the days of the week in order

know there are 12 months in a year, say the months of the year in order

know how many days in each of the months of the year e.g, through rhyme "thirty days hath September, April, June and November"

know there are 60 seconds in 1 minute, 60 minutes in 1 hour

Know there are 24 hours in 1 day, 52 weeks in 1 year, 365 days in 1 year

COUNTING

count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

count, read and write numbers to 100 in numerals

count in multiples of twos, fives and tens

given a number, identify one more and one less

use the language of: equal to, more than, less than (fewer), most, least

identify and represent numbers using objects and pictorial representations including the number line

count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

count from 0 in multiples of 4, 8, 50 and 100

find 10 or 100 more or less than a given number

count backwards through zero to include negative numbers

count in multiples of 6, 7, 9, 25 and 1 000

find 1 000 more or less than a given number

COMPARING NUMBERS

compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs

compare and order numbers up to 1 000

order and compare numbers beyond 1 000

READING AND WRITING NUMBERS

read and write numbers to at least 100 in numerals and in words

read and write numbers up to 1 000 in numerals and in words

tell and write the time from an analogue clock, including 12-hour and 24-hour clocks

read and write numbers up to 1 0000 in numerals and in words

UNDERSTANDING PLACE VALUE

recognise the place value of each digit in a two-digit number (tens, ones)

recognise the place value of each digit in a three-digit number (hundreds, tens, ones)

recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

NUMBER BONDS

represent and use number bonds and related subtraction facts within 20

recall and use addition and subtraction facts to 20 fluently

derive and use related facts up to 100

MENTAL CALCULATION

add and subtract one-digit and two-digit numbers to 20, including zero

read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

add and subtract numbers using concrete objects, pictorial representations, and mentally, including: *

a two-digit number and ones

* a two-digit number and tens

* two two-digit numbers

* adding three one-digit numbers

add and subtract numbers mentally, including:

* a three-digit number and ones

* a three-digit number and tens

* a three-digit number and hundreds

MULTIPLICATION AND DIVISION FACTS

recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

write and calculate mathematical statements for multiplication and division using the multiplication tables that they know

recall multiplication and division facts for multiplication tables up to 12×12

use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

Year 5 Essential Number Skills

FACTS

know there are 7 days in a week, say the days of the week in order

know there are 12 months in a year, say the months of the year in order

know how many days in each of the months of the year e.g, through rhyme “thirty days hath September, April, June and November”

know there are 60 seconds in 1 minute, 60 minutes in 1 hour

Know there are 24 hours in 1 day, 52 weeks in 1 year, 365 days in 1 year

COUNTING

count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

count, read and write numbers to 100 in numerals

count in multiples of twos, fives and tens

given a number, identify one more and one less

use the language of: equal to, more than, less than (fewer), most, least

identify and represent numbers using objects and pictorial representations including the number line

count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

count from 0 in multiples of 4, 8, 50 and 100

find 10 or 100 more or less than a given number

count backwards through zero to include negative numbers

count in multiples of 6, 7, 9, 25 and 1 000

find 1 000 more or less than a given number

interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000

COMPARING NUMBERS

compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs

compare and order numbers up to 1 000

order and compare numbers beyond 1 000

order and compare numbers to at least 1 000 000 and determine the value of each digit

READING AND WRITING NUMBERS

read and write numbers to at least 100 in numerals and in words

read and write numbers up to 1 000 in numerals and in words

tell and write the time from an analogue clock, including 12-hour and 24-hour clocks

read and write numbers up to 1 0000 in numerals and in words

read, write numbers to at least 1 000 000 and determine the value of each digit

UNDERSTANDING PLACE VALUE

recognise the place value of each digit in a two-digit number (tens, ones)

recognise the place value of each digit in a three-digit number (hundreds, tens, ones)

recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

NUMBER BONDS

represent and use number bonds and related subtraction facts within 20

recall and use addition and subtraction facts to 20 fluently

derive and use related facts up to 100

MENTAL CALCULATION

add and subtract one-digit and two-digit numbers to 20, including zero

read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

add and subtract numbers using concrete objects, pictorial representations, and mentally, including:

- * a two-digit number and ones
- * a two-digit number and tens
- * two two-digit numbers
- * adding three one-digit numbers

add and subtract numbers mentally, including:

- * a three-digit number and ones
- * a three-digit number and tens
- * a three-digit number and hundreds *

add and subtract numbers mentally with increasingly large numbers

ROUNDING

round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000

MULTIPLICATION AND DIVISION FACTS

recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

write and calculate mathematical statements for multiplication and division using the multiplication tables that they know

recall multiplication and division facts for multiplication tables up to 12×12

use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

Year 6 Essential Number Skills

FACTS

know there are 7 days in a week, say the days of the week in order

know there are 12 months in a year, say the months of the year in order

know how many days in each of the months of the year e.g, through rhyme "thirty days hath September, April, June and November"

know there are 60 seconds in 1 minute, 60 minutes in 1 hour

Know there are 24 hours in 1 day, 52 weeks in 1 year, 365 days in 1 year

COUNTING

count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number

count, read and write numbers to 100 in numerals

count in multiples of twos, fives and tens

given a number, identify one more and one less

use the language of: equal to, more than, less than (fewer), most, least

identify and represent numbers using objects and pictorial representations including the number line

count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward

count from 0 in multiples of 4, 8, 50 and 100

find 10 or 100 more or less than a given number

count backwards through zero to include negative numbers

count in multiples of 6, 7, 9, 25 and 1 000

find 1 000 more or less than a given number

interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000

use negative numbers in context, and calculate intervals across zero

COMPARING NUMBERS

compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs

compare and order numbers up to 1 000

order and compare numbers beyond 1 000

order and compare numbers to at least 1 000 000 and determine the value of each digit

order and compare numbers up to 10 000 000 and determine the value of each digit

READING AND WRITING NUMBERS

read and write numbers to at least 100 in numerals and in words

read and write numbers up to 1 000 in numerals and in words

tell and write the time from an analogue clock, including 12-hour and 24-hour clocks

read and write numbers up to 1 0000 in numerals and in words

read, write numbers to at least 1 000 000 and determine the value of each digit

read, write numbers up to 10 000 000 and determine the value of each digit

perform mental calculations, including with mixed operations and large numbers

UNDERSTANDING PLACE VALUE

recognise the place value of each digit in a two-digit number (tens, ones)

recognise the place value of each digit in a three-digit number (hundreds, tens, ones)

recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)

NUMBER BONDS

represent and use number bonds and related subtraction facts within 20

recall and use addition and subtraction facts to 20 fluently

derive and use related facts up to 100

ROUNDING

round any number up to 1 000 000 to the nearest 10, 100, 1 000, 10 000 and 100 000

round any whole number to a required degree of accuracy

MULTIPLICATION AND DIVISION FACTS

recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers

recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables

write and calculate mathematical statements for multiplication and division using the multiplication tables that they know

recall multiplication and division facts for multiplication tables up to 12×12

use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

perform mental calculations, including with mixed operations and large numbers