RISING STARS Mathematical Vocabulary Checklists

EARLY YEARS FOUNDATION STAGE to YEAR 6

EARLY YEARS FOUNDATION STAGE

NUMBER

Number and place value

Number zero number one, two, three ... to twenty and beyond teens numbers, eleven, twelve ... twenty none how many ...? count, count (up) to, count on (from, to), count back (from, to) count in ones, twos, fives, tens is the same as more, less odd, even few pattern pair

Place value

ones tens digit the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less compare order size first, second, third... twentieth last, last but one before, after next between

Estimating

guess how many ...? estimate nearly close to about the same as just over, just under too many, too few enough, not enough

Addition and subtraction

add, more, and make, sum, total altogether double one more, two more ... ten more how many more to make ...? how many more is ... than ...? how much more is ...? take away how many are left/left over? how many have gone? one less, two less, ten less ... how many fewer is ... than ...? how much less is ...?

Multiplication and division sharing doubling halving

number patterns

Fractions parts of a whole half quarter

MEASUREMENT

measure

size compare guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as just over, just under

Length

metre length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on

Weight

weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

Capacity and volume

full empty half full holds container

Time

time days of the week, Monday, Tuesday day, week birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after next. last now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time hour, o'clock clock, watch, hands

Money

money coin penny, pence, pound price, cost buy, sell spend, spent pay

GEOMETRY Properties of shape

shape, pattern flat curved, straight round hollow, solid sort make, build, draw size bigger, larger, smaller symmetrical pattern, repeating pattern match

2-D shape

corner, side rectangle (including square) circle triangle

3-D shape

face, edge, vertex, vertices cube pyramid sphere cone

Position and direction

position over, under above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge corner direction left, right up, down forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from movement slide roll turn stretch, bend whole turn, half turn

STATISTICS

count, sort group, set list

GENERAL

pattern puzzle what could we try next? how did you work it out? recognise describe draw compare sort

NUMBER

Number and place value

Number number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens equal to equivalent to is the same as more. less most, least many odd, even multiple of few pattern pair Place value ones tens

tens digit the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less equal to one more, ten more one less, ten less compare order size first, second, third... twentieth last, last but one before, after next between half-way between above, below

Estimating

guess how many ...? estimate nearly roughly close to about the same as just over, just under too many, too few enough, not enough

Addition and subtraction

addition add, more, and make, sum, total altogether double near double half, halve one more, two more ... ten more how many more to make ...? how many more is ... than ...?

subtract

take away how many are left/left over? how many have gone? one less, two less, ten less ... how many fewer is ... than ...? how much less is ...? difference between equals is the same as number bonds/pairs missing number

Multiplication and division

multiplication multiply multiplied by multiple division dividing grouping sharing doubling halving array number patterns

Fractions

fraction equal part equal grouping equal sharing parts of a whole half one of two equal parts quarter one of four equal parts

MEASUREMENT

measure

measurement

size compare guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as roughly just over, just under

Length

centimetre, metre length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, near, close ruler metre stick

Weight kilogram, half kilogram

weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

Capacity and volume litre, half litre

capacity volume full empty more than less than half full quarter full holds container

Time

time days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, month, year birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after earlier, later next, first, last midnight date now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes

usually

once, twice hour, o'clock, half past, quarter past, quarter to clock, clock face, watch, hands hour hand, minute hand hours, minutes

Money

money coin penny, pence, pound price, cost buy, sell spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...? total

GEOMETRY Properties of shape

shape, pattern flat curved, straight round hollow, solid sort make, build, draw size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern pattern, repeating pattern match **2-D shape** corner, side point, pointed rectangle (including square) circle triangle

3-D shape face, edge, vertex, vertices cube, cuboid pyramid sphere cone cylinder

Position and direction

position over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge centre corner direction journey left, right up, down forwards, backwards, sideways across

next to, close, near, far along through to, from, towards, away from movement slide roll turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn

STATISTICS

count, sort, vote group, set list, table

GENERAL

sort

pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? explain your thinking recognise describe draw compare

NUMBER

Number and place value

Number number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred, two hundred ... one thousand none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours and so on equal to equivalent to is the same as more. less most, least tally many odd, even multiple of sequence continue predict few pattern pair, rule > greater than < less than

Place value ones tens, hundreds digit one-, two- or three-digit number place, place value stands for, represents exchange the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less, ten less equal to compare order size first, second, third ... twentieth twenty-first, twenty-second ... last, last but one before, after next between halfway between above, below Estimating guess

how many ...? estimate nearly roughly close to about the same as just over, just under exact, exactly

too many, too few enough, not enough

Addition and subtraction

addition add, more, and make, sum, total altogether double near double half, halve one more, two more ... ten more ... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between equals is the same as number bonds/pairs/facts tens boundary

Multiplication and division

multiplication multiply multiplied by multiple groups of times once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into grouping sharing, share, share equally left, left over one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact

Fractions

fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts

MEASUREMENT

measure measurement size compare measuring scale

guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as roughly just over, just under

Length

centimetre, metre length, height, width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close ruler metre stick, tape measure

Weight

kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

Capacity and volume

litre, half litre, millilitre capacity volume full empty more than less than half full quarter full holds, contains container

Temperature temperature degree

Time

time days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year birthday, holiday morning, afternoon, evening, night bedtime, dinnertime, playtime today, yesterday, tomorrow before. after earlier. later next, first, last midnight date now, soon, early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past

bigger, larger, smaller

pattern, repeating pattern match

2-D shape corner, side point, pointed rectangle (including square), rectangular circle, circular triangle, triangular pentagon hexagon octagon

3-D shape face, edge, vertex, vertices cube, cuboid pyramid sphere cone cylinder

Position and direction

position over, under, underneath above, below top, bottom, side on, in outside, inside around in front. behind front, back beside, next to opposite apart between middle, edge centre corner direction journey, route left, right

penny, pence, pound

buy, bought, sell, sold

price, cost

spend, spent

dear, costs more

costs the same as

GEOMETRY

Properties of shape

how much ...?

how many ...?

shape, pattern

curved, straight

make, build, draw

hollow, solid

cheap, costs less, cheaper

pay

total

flat

round

sort

size

surface

change

hour hand, minute hand

hours, minutes, seconds

clock, clock face, watch, hands

digital/analogue clock/watch, timer

symmetry, symmetrical, symmetrical pattern

up, down higher, lower forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from clockwise, anticlockwise movement slide roll turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn right angle straight line

STATISTICS

count, tally, sort, vote graph, block graph, pictogram represent group, set list, table label, title most popular, most common least popular, least common

GENERAL

pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort mental calculation written calculation

NUMBER

Number and place value

Number number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred, two hundred ... one thousand none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours, eights, fifties and so on to hundreds equal to equivalent to is the same as more, less most. least tally many odd, even multiple of, factor of sequence continue predict few pattern pair, rule relationship > greater than < less than Roman numerals

Place value ones tens, hundreds digit one-, two- or three-digit number place, place value stands for, represents exchange the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more, one hundred more one less, ten less, one hundred less equal to compare order size first, second, third ... twentieth twenty-first, twenty-second ... last. last but one before, after next between halfway between above, below

Estimating

guess how many ...? estimate nearly roughly close to approximate, approximately about the same as just over, just under

Ε

R

3

exact, exactly too many, too few enough, not enough round, nearest, round to the nearest ten, hundred round up, round down

Addition and subtraction

addition add, more, and make, sum, total altogether double near double half, halve one more, two more ... ten more ... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between equals is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary

Multiplication and division

multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact

Fractions

fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ...

MEASUREMENT

measure measurement size compare measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly

just over, just under

Length

L

millimetre, centimetre, metre, kilometre, mile
length, height, width, depth
long, short, tall
high, low
wide, narrow
thick, thin
longer, shorter, taller, higher ... and so on
longest, shortest, tallest, highest ... and so
on
far, further, furthest, near, close
distance apart ... between ... to ... from
perimeter
ruler
metre stick, tape measure
Weight

kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales **Capacity and volume** litre, half litre, millilitre capacity volume full empty more than less than half full quarter full holds, contains container

Temperature temperature degree centigrade

Time

time days of the week, Monday, Tuesday months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year, century birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after earlier. later next, first, last midnight calendar, date now, soon, early, late, earliest, latest quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest

takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands

digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds Roman numerals 12-hour clock time, 24-hour clock time

Money

money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...?

GEOMETRY

Properties of shape shape, pattern

flat

curved, straight round hollow, solid sort make, build, draw perimeter surface size bigger, larger, smaller

symmetry, symmetrical, symmetrical pattern line symmetry pattern, repeating pattern match

2-D shape corner, side point, pointed rectangle (including square), rectangular circle, circular triangle, triangular pentagon, pentagonal hexagon, hexagonal octagon, octagonal quadrilateral right-angled parallel, perpendicular

3-D shape face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere cone cylinder prism, triangular prism

Position and direction position

over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge centre corner direction journey, route left, right up, down higher, lower forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from clockwise, anticlockwise compass point north, south, east, west, N, S, E, W horizontal, vertical, diagonal movement slide roll turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn angle ... is a greater/smaller angle than right angle

acute angle obtuse angle straight line

STATISTICS

count, tally, sort, vote graph, block graph, pictogram represent group, set list, table, chart, bar chart, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common

GENERAL

pattern puzzle problem, problem-solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort greatest value, least value mental calculation written calculation statement

NUMBER

Number and place value

Number number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... ten thousand, hundred thousand, million none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds, thousands equal to equivalent to is the same as more, less most. least tally many odd, even multiple of, factor of sequence continue predict few pattern pair, rule relationship

next, consecutive

> greater than
 < less than
 Roman numerals
 integer, positive, negative
 above/below zero, minus
 negative numbers

Place value

ones tens. hundreds digit one-, two- or three-digit number place, place value stands for, represents exchange the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more, one hundred more, one thousand more one less, ten less, one hundred less, one thousand less equal to compare order size first, second, third ... twentieth twenty-first, twenty-second ... last, last but on before, after next between halfway between above, below

Estimating

guess how many estimate nearly roughly close to approximate, approximately about the same as just over, just under exact, exactly too many, too few enough, not enough round, nearest, round to the nearest ten, hundred, thousand round up, round down

Addition and subtraction

addition add, more, and make, sum, total altogether double near double half, halve one more, two more... ten more... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...?

difference between equals is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary inverse

Multiplication and division

multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact inverse square, squared cube, cubed

Fractions (including decimals)

fraction equivalent fraction mixed number numerator, denominator equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ... hundredths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion

MEASUREMENT

measure measurement size compare unit, standard unit metric unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly just over, just under

Length

millimetre, centimetre, metre, kilometre, mile length, height, width, depth, breadth long, short, tall high, low wide. narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close distance apart ... between ... to ... from edge, perimeter area, covers square centimetre (cm²) ruler metre stick, tape measure

Weight

mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/ lightest kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

Capacity and volume

litre, half litre, millilitre capacity volume full empty more than less than half full quarter full holds, contains container, measuring cylinder

Temperature

temperature degree centigrade

Time

time

days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year, leap year, century, millennium birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after earlier, later next, first, last noon, midnight calendar, date, date of birth now, soon, early, late, earliest, latest quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to

5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds timetable, arrive, depart Roman numerals 12-hour clock time, 24-hour clock time

Money

money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...?

GEOMETRY

Properties of shape

shape, pattern flat, line curved, straight round hollow, solid sort make, build, construct, draw, sketch perimeter centre surface angle, right-angled base, square-based size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry reflect, reflection pattern, repeating pattern match regular, irregular

2-D shape

2-D, two-dimensional corner, side point, pointed rectangle (including square), rectangular, oblong rectilinear circle, circular triangle, triangular equilateral triangle, isosceles triangle, scalene triangle pentagon, pentagonal hexagon, hexagonal heptagon octagon, octagonal quadrilateral parallelogram, rhombus, trapezium polygon right-angled parallel, perpendicular 3-D shape

3-D, three-dimensional face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere, spherical cone cylinder, cylindrical prism, triangular prism tetrahedron, polyhedron

Position and direction

position over, under, underneath above, below top, bottom, side on. in outside, inside around in front, behind front. back beside, next to opposite apart between middle, edge centre corner direction journey, route left, right up, down higher, lower forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from clockwise, anticlockwise compass point north, south, east, west, N, S, E, W north-east, north-west, south-east, south-west, NE, NW, SE, SW horizontal, vertical, diagonal translate, translation

movement slide roll turn stretch, bend whole turn, half turn, guarter turn, three-quarter turn rotate, rotation angle, is a greater/smaller angle than degree right angle acute angle obtuse angle reflection straight line ruler, set square angle measurer, compass

STATISTICS

count, tally, sort, vote survey, questionnaire, data graph, block graph, pictogram represent group, set list, table, chart, bar chart, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common

GENERAL

pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out?

show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort greatest value, least value mental calculation written calculation statement justify make a statement

NUMBER

Number and place value

Number number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... ten thousand, hundred thousand, million none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds. thousands equal to equivalent to is the same as more, less most. least tally many odd, even multiple of, factor of factor pair sequence continue predict few pattern pair, rule relationship

next, consecutive > greater than < less than ≥ greater than or equal to ≤ less than or equal to Roman numerals integer, positive, negative above/below zero, minus negative numbers formula divisibility square number prime number ascending/descending order

Place value

ones tens, hundreds digit one-, two- or three-digit number place, place value stands for, represents exchange the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more, one hundred more, one thousand more one less, ten less, one hundred less, one thousand less equal to compare order size first, second, third ... twentieth twenty-first, twenty-second last, last but one

before, after next between halfway between above, below

Estimating

guess how many ...? estimate nearly roughly close to approximate, approximately about the same as just over, just under exact, exactly too many, too few enough, not enough round, nearest, round to the nearest ten, hundred, thousand, ten thousand round up, round down

Addition and subtraction

addition add, more, and make, sum, total altogether double near double half, halve one more, two more ... ten more ... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...? difference between equals is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary, ones boundary, tenths boundary inverse

Multiplication and division

multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact

inverse square, squared cube, cubed

Fractions (including decimals and percentages)

fraction, proper/improper fraction equivalent fraction mixed number numerator, denominator equivalent, reduced to, cancel equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts quarter, two quarters, three quarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ... hundredths, thousandths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion, in every, for every percentage, per cent, %

MEASUREMENT

measure measurement size compare unit, standard unit metric unit, imperial unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly just over, just under

Length

millimetre, centimetre, metre, kilometre, mile length, height, width, depth, breadth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close distance apart ... between ... to ... from edge, perimeter area, covers square centimetre (cm²), square metre (m²), square millimetre (mm²) ruler metre stick, tape measure

Weight

mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/ lightest kilogram, half kilogram, gram weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

Capacity and volume litre, half litre, millilitre capacity

volume full empty more than less than half full quarter full holds, contains container, measuring cylinder pint, gallon

Temperature

temperature degree centigrade

Time

time

days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year, leap year, century, millennium birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before, after earlier, later next, first, last noon, midnight calendar, date, date of birth now, soon, early, late, earliest, latest quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago?

how long will it be to ...? how long will it take to ...? how often? always, never, often, sometimes usually once, twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds timetable, arrive, depart Roman numerals 12-hour clock time, 24-hour clock time

Money

money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...? total discount currency

GEOMETRY Properties of shape shape, pattern

flat, line curved, straight round hollow, solid sort make, build, construct, draw, sketch perimeter centre, radius, diameter surface angle, right-angled congruent base, square-based size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry reflect. reflection axis of symmetry, reflective symmetry pattern, repeating pattern match regular, irregular

2-D shape

2-D, two-dimensional corner, side point, pointed rectangle (including square), rectangular, oblong rectilinear circle, circular triangle, triangular equilateral triangle, isosceles triangle, scalene triangle pentagon, pentagonal hexagon, hexagonal heptagon octagon, octagonal quadrilateral parallelogram, rhombus, trapezium

polygon right -angled parallel, perpendicular x-axis, y-axis, quadrant

3-D shape 3-D, three-dimensional face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere, spherical cone cylinder, cylindrical prism, triangular prism tetrahedron, polyhedron octahedron

Position and direction

position over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge centre corner direction journey, route left, right up, down

higher, lower forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from clockwise, anticlockwise compass point north, south, east, west, N, S, E, W north-east. north-west. south-east. south-west, NE, NW, SE, SW horizontal, vertical, diagonal translate, translation coordinate movement slide roll turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn rotate, rotation angle, is a greater/smaller angle than degree right angle acute angle obtuse angle reflection straight line ruler, set square angle measurer, compass, protractor

STATISTICS

count, tally, sort, vote survey, questionnaire, data, database graph, block graph, pictogram represent group, set list, table, chart, bar chart, frequency table, bar line chart Carroll diagram, Venn diagram line graph label, title, axis, axes diagram most popular, most common least popular, least common maximum/minimum value outcome

GENERAL

pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort greatest value, least value mental calculation written calculation statement justify make a statement explain your reasoning

NUMBER

Number and place value

Number number numeral zero one, two, three ... twenty teens numbers, eleven, twelve ... twenty twenty-one, twenty-two ... one hundred, two hundred ... one thousand ... ten thousand, hundred thousand, million none how many ...? count, count (up) to, count on (from, to), count back (from, to) forwards backwards count in ones, twos, fives, tens, threes, fours, eights, fifties, sixes, sevens, nines, twenty-fives and so on to hundreds, thousands equal to equivalent to is the same as more, less most, least tally many odd, even multiple of, factor of factor pair sequence continue predict few pattern pair, rule relationship next, consecutive > greater than < less than

 \geq greater than or equal to ≤ less than or equal to Roman numerals integer, positive, negative above/below zero, minus negative numbers formula divisibility square number prime number factorise prime factor ascending/descending order digit total Place value ones tens, hundreds digit one-, two- or three-digit number place, place value stands for, represents exchange

the same number as, as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more, one hundred more, one thousand more one less, ten less, one hundred less, one thousand less equal to compare order size first, second, third ... twentieth twenty-first, twenty-second ... last. last but one before. after next

between

halfway between above, below

Estimating

guess how many ...? estimate nearly roughly close to approximate, approximately about the same as just over, just under exact, exactly too many, too few enough, not enough round, nearest, round to the nearest ten, hundred, thousand, ten thousand round up, round down

Addition and subtraction

addition add, more, and make, sum, total altogether double near double half, halve one more, two more ... ten more ... one hundred more how many more to make ...? how many more is ... than ...? how much more is ...? subtract take away how many are left/left over? how many have gone? one less, two less, ten less ... one hundred less how many fewer is ... than ...? how much less is ...?

difference between equals is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary, ones boundary, tenths boundary inverse

Multiplication and division

multiplication multiply multiplied by multiple, factor groups of times product once, twice, three times ... ten times repeated addition division dividing, divide, divided by, divided into left, left over, remainder grouping sharing, share, share equally one each, two each, three each ... ten each group in pairs, threes ... tens equal groups of doubling halving array row, column number patterns multiplication table multiplication fact, division fact inverse square, squared cube, cubed

Fractions (including decimals, percentages, ratio and proportion) fraction, proper/improper fraction

equivalent fraction mixed number numerator, denominator equivalent, reduced to, cancel equal part equal grouping equal sharing parts of a whole half, two halves one of two equal parts guarter, two guarters, three guarters one of four equal parts one third, two thirds one of three equal parts sixths, sevenths, eighths, tenths ... hundredths, thousandths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion, in every, for every ratio percentage, per cent, %

Algebra

formula, formulae equation unknown variable

MEASUREMENT

measure measurement size compare unit, standard unit metric unit, imperial unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, close to, about the same as, approximately roughly just over, just under

Length

centimetre, metre, millimetre, kilometre, mile, yard, foot, feet, inch, inches length, height, width, depth, breadth long, short, tall high, low wide, narrow thick. thin longer, shorter, taller, higher ... and so on longest, shortest, tallest, highest ... and so on far, further, furthest, near, close distance apart ... between ... to ... from edge, perimeter, circumference area, covers square centimetre (cm²), square metre (m²), square millimetre (mm²) ruler metre stick, tape measure

Weight

mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/ lightest tonne, kilogram, half kilogram, gram, pound, ounce weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales

Capacity and volume

litre, half litre, millilitre, centilitre

cubic centimetres(cm³), cubic metres (m³), cubic millimetres (mm³), cubic kilometres (km³)

capacity volume

full

empty more than less than half full quarter full holds, contains container, measuring cylinder pint, gallon

Temperature

temperature degree centigrade

Time

time days of the week, Monday, Tuesday ... months of the year (January, February ...) seasons: spring, summer, autumn, winter day, week, weekend, fortnight, month, year, leap year, century, millennium birthday, holiday morning, afternoon, evening, night bedtime, dinner time, playtime today, yesterday, tomorrow before. after earlier, later next, first, last noon, midnight calendar, date, date of birth now, soon, early, late, earliest, latest quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer, takes less time how long ago? how long will it be to ...? how long will it take to ...?

how often? always, never, often, sometimes usually once. twice hour, o'clock, half past, quarter past, quarter to 5, 10, 15 ... minutes past a.m., p.m. clock, clock face, watch, hands digital/analogue clock/watch, timer hour hand, minute hand hours, minutes, seconds timetable, arrive, depart Roman numerals 12-hour clock time, 24-hour clock time Greenwich Mean Time, British Summer Time. International Date Line

Money

money coin penny, pence, pound price, cost buy, bought, sell, sold spend, spent pay change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...? total discount currency profit, loss

GEOMETRY Properties of shape

shape, pattern flat, line

42 RISING STARS Mathematical Vocabulary

curved, straight round hollow, solid sort make, build, construct, draw, sketch perimeter centre, radius, diameter circumference, concentric, arc net, open, closed surface angle, right-angled congruent intersecting, intersection plane base, square-based size bigger, larger, smaller symmetry, symmetrical, symmetrical pattern line symmetry reflect, reflection axis of symmetry, reflective symmetry pattern, repeating pattern match regular, irregular

2-D shape

2-D, two-dimensional corner, side point, pointed rectangle (including square), rectangular, oblong rectilinear circle, circular triangle, triangular equilateral triangle, isosceles triangle, scalene triangle pentagon, pentagonal hexagon, hexagonal heptagon octagon, octagonal quadrilateral parallelogram, rhombus, trapezium, kite polygon right-angled parallel, perpendicular x-axis, y-axis, quadrant

3-D shape 3-D, three-dimensional face, edge, vertex, vertices cube, cuboid pyramid sphere, hemisphere, spherical cone cylinder, cylindrical prism, triangular prism tetrahedron, polyhedron octahedron dodecahedron net, open, closed

Position and direction

position over, under, underneath above, below top, bottom, side on, in outside, inside around in front, behind front, back beside, next to opposite apart between middle, edge centre corner direction journey, route left, right up, down

higher, lower forwards, backwards, sideways across next to, close, near, far along through to, from, towards, away from clockwise, anticlockwise compass point north, south, east, west, N, S, E, W north-east, north-west, south-east, south-west, NE, NW, SE, SW horizontal, vertical, diagonal translate, translation coordinate movement slide roll turn stretch, bend whole turn, half turn, quarter turn, three-quarter turn rotate. rotation angle, is a greater/smaller angle than degree right angle acute angle obtuse angle reflex angle reflection straight line ruler, set square

STATISTICS

count, tally, sort, vote survey, questionnaire, data, database graph, block graph, pictogram represent group, set

angle measurer, compass, protractor

list, table, chart, bar chart, frequency table, bar line chart Carroll diagram, Venn diagram line graph pie chart label, title, axis, axes diagram most popular, most common least popular, least common maximum/minimum value outcome mean (mode, median, range as estimates for this) statistics, distribution

GENERAL

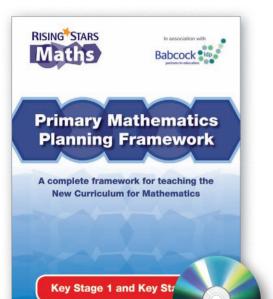
pattern puzzle problem, problem solving mental, mentally what could we try next? how did you work it out? show how you ... explain your thinking explain your method describe the pattern describe the rule investigate recognise describe draw compare sort greatest value, least value mental calculation written calculation statement iustify make a statement explain your reasoning

Also available from

Primary Mathematics Planning Framework

RISING STARS Maths

Comprehensive medium-term planning and assessment for the new National Curriculum for Primary Mathematics

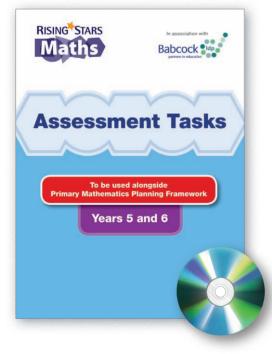


Rising Stars has teamed up with Babcock Learning and Development Partnership (Devon Local Authority), one of the UK's leading school improvement services, to develop a fully planned framework that will help you to deliver the new curriculum with ease and make rich connections across mathematical ideas.

- Time-saving takes all of the effort out of planning for the new curriculum
- Flexible schools can easily edit the pathways to suit their requirements
- Supportive gives schools the confidence to deliver the New Curriculum for Mathematics
- **Cost-effective** helps schools make the most of existing resources and identify gaps in teacher knowledge

Can both be used alongside any mathematics resources you have in school

Assessment Tasks



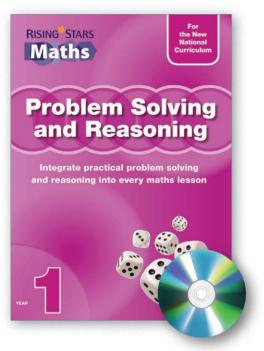
New assessment tasks to support you in assessing pupils' understanding of each objective in the new primary maths curriculum. Three photocopiable books provide 14 assessment tasks for each year linked to the success criteria in each sequence of the Primary Mathematics Planning Framework.

- Designed to be used at the end of the teaching sequence
- Enables identification of those children who have either mastered the content in the sequence or who are still working towards it and need further support
- Includes 'look out for children who ...' guidance to support teachers with early identification of problems with conceptual understanding and remediation
- All assessment tasks are provided in print and on an editable CD-ROM for flexible use across year groups



Also available from

Problem Solving and Reasoning



RISING STARS Maths

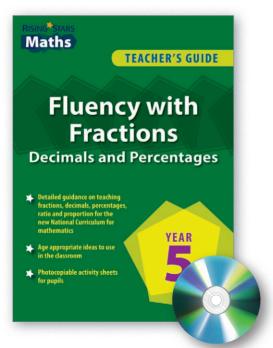
With the renewed emphasis within the new maths curriculum on problem solving and reasoning, this brand new resource will support schools in integrating practical problem solving into their day-to-day teaching.

- Effective strategies and techniques to develop skills across the curriculum
- Key strategies provide practical ideas and questions to embed problem solving and reasoning in every maths lesson
- Each pack includes a bank of investigative activities for pupils to apply their reasoning skills
- Can be used to supplement any existing maths resource

'A fantastic resource to help teachers plan and deliver great lessons involving problem solving and reasoning'

Caroline Clissold, Coordinator for the National Centre for Excellence in the Teaching of Mathematics (NCETM)

Fluency with Fractions



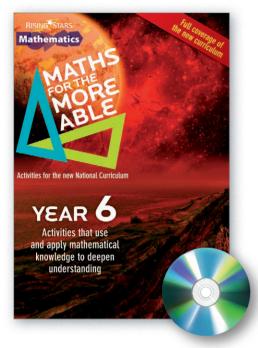
Differentiated activities to promote conceptual understanding and number fluency

- Full coverage of the National Curriculum content
- Easy-to-follow guidance includes clear NC links, prior knowledge requirements and helpful subject knowledge to boost confidence for non-specialists and teaching assistants
- Differentiated activities ensure challenging content can be accessed by all abilities
- References to a wide variety of visual models and images contextualises learning for pupils and helps develop number fluency

CD-ROMs contain editable versions of all the activities

Also available from Maths for the More Able





Developed for the new National Curriculum, *Maths for the More Able* is a bank of challenging, space-themed problem-solving activities designed to engage and stretch pupils

- Engage and excite pupils using challenging, space-themed problem-solving activities
- Gain the confidence to stretch your more able pupils in mathematics
- Adapt and edit activities and create your own resources
- Give pupils the opportunity to explore and apply National Curriculum maths content

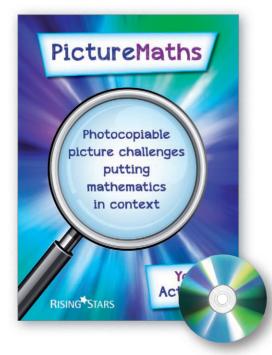
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Ideal for

Pupil Premium

Picture Maths



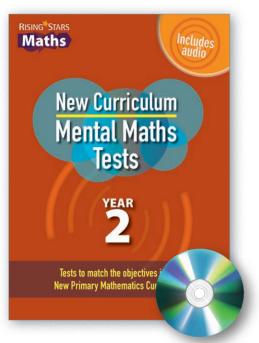
Picture Maths offers a new approach to teaching mathematical problem-solving that will help engage and raise the attainment of visual and reluctant learners using picture-based activities. The tasks develop a deeper level of understanding by putting maths problems into real-life contexts, making maths relevant.

- Teaching ideas to introduce topics in a real-life context
- Photocopiable pupil worksheets using pictures to solve mathematical problems
- Extension and homework activities to challenge and extend learning

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Also available from

New Curriculum Mental Maths Tests



Fully matched to the new National Curriculum, these brand new packs provide regular, weekly mental maths practice that support children in improving their ability to answer mental maths questions.

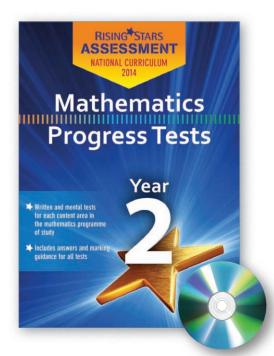
RISING⁺STARS

- Weekly tests provide regular mental maths practice
- Written to match the objectives of the new National Curriculum
- Everything you need to ensure your pupils are prepared for the mental maths element of the KS2 National Tests

Includes audio tests for Years 1-6

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- Assess pupils' learning and demonstrate progress to Ofsted
- CD-ROM includes a unique Progress Tracker to monitor and report on individuals and classes
- Track how pupils are progressing against the topic and their year group
- Supports assessment without levels

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