

# The new National Curriculum 2014 - Year 1

## ENGLISH

### Reading

- Decode words using phonics
- Match graphemes for all phonemes
- Blend sounds in unfamiliar words containing taught GPCs
- Read: common 'exception' words; words with common suffixes; words of more than one syllable containing taught GPCs; contractions
- Read aloud phonics-based books; reread to develop fluency and confidence
- Share and discuss poems, stories and non-fiction beyond own reading level
- Link reading to own experiences
- Retell familiar stories
- Join in with predictable phrases
- Recite some rhymes and poems by heart
- Draw on prior knowledge to make sense of texts
- Check for sense and correct reading errors
- Discuss: word meanings; significance of title and events
- Make inferences and predictions
- Explain their understanding of what is read to them

### Writing

- Spell: words containing each of the 40+ phonemes; common 'exception' words; days of the week
- Name letters of the alphabet
- Use common prefixes and suffixes
- Learn and apply spelling rules in Appendix 1
- Write simple dictated sentences
- Form correctly: lower-case letters, capital letters and digits
- Practise handwriting in letter 'families'
- Compose sentences orally before writing
- Sequence sentences to form short narratives

- Reread sentences to check they make sense
- Discuss and read aloud own writing with/ to peers or teacher
- Leave spaces between words
- Join words and clauses using 'and'
- Begin to use basic punctuation (. ? !)
- Use capital letters to start sentences and for proper nouns
- Learn and apply grammar rules and terminology in Appendix 2

### Spoken language

- Listen and respond appropriately
- Ask relevant questions
- Build vocabulary
- Articulate and justify own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate actively in conversations
- Speculate, hypothesise and explore ideas
- Speak clearly and fluently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Keep listeners interested
- Explore different viewpoints
- Communicate effectively using appropriate register

## LANGUAGES

- Not required at Key Stage 1

## ART AND DESIGN (KS1)

- Use a range of materials
- Use drawing, painting and sculpture
- Develop techniques of colour, pattern, texture, line, shape, form and space
- Learn about a range of artists, craft makers and designers

## SCIENCE

- Identify and name common plants and describe their parts
- Identify and name common animals, and describe and compare their structures
- Identify, name, draw and label parts of the human body; associate body parts with senses
- Distinguish between objects and materials
- Identify and name everyday materials
- Describe simple properties of everyday materials
- Compare and classify materials
- Observe seasonal changes in weather and day length

### Working scientifically

- Ask simple questions
- Observe closely
- Perform simple tests
- Identify and classify
- Suggest answers to questions
- Gather and record data

## MUSIC (KS1)

- Sing songs and speak chants and rhymes
- Play tuned and untuned instruments musically
- Listen to and understand a range of live and recorded music
- Make and combine sounds musically

## DESIGN AND TECHNOLOGY (KS1)

- Design purposeful, functional and appealing products
- Generate, develop, model and communicate ideas
- Select from and use a range of tools and materials
- Evaluate existing products and own ideas and products
- Build and improve structures
- Explore and use mechanisms (e.g. levers, wheels)
- Prepare dishes using principles of a healthy diet
- Understand where food comes from

## COMPUTING (KS1)

- Understand use of algorithms
- Write and test simple programs
- Use logical reasoning to make predictions
- Create, organise, store, manipulate and retrieve digital content
- Recognise uses of IT beyond school
- Communicate online safely and respectfully

## PHYSICAL EDUCATION (KS1)

- Master and apply basic movement skills
- Participate in team games
- Perform dances using simple movements
- (KS1 or KS2) Swim at least 25 metres; use a range of strokes; perform self-rescue

## GEOGRAPHY (KS1)

- Name and locate the world's continents and oceans; the UK's countries, seas and capitals
- Compare a UK locality with one outside Europe
- Identify weather patterns in the UK; locate hot/cold areas of the world
- Use basic geographical vocabulary to describe physical and human features
- Use world maps, atlases and globes
- Use the four points of the compass and locational/directional language
- Recognise features on aerial photos and plans; devise a map with symbols and key
- Study the immediate environment

## MATHEMATICS

### Number

- Count to/across 100
- Count in 1s, 2s, 5s and 10s
- Identify 'one more' and 'one less'
- Read and write numbers to 20 in words and numerals
- Use objects and pictures to represent numbers
- Use language of comparison
- Use +, - and = signs
- Know number bonds to 20
- Add and subtract numbers 0 to 20
- Solve one-step problems
- Recognise and use  $\frac{1}{2}$  and  $\frac{1}{4}$

### Measurement

- Compare, describe, measure, record and solve problems for lengths, weights, capacities/volumes and times
- Recognise coins and notes
- Sequence events chronologically using ordering language
- Use language relating to dates
- Tell time to the hour and half-hour

### Geometry

- Recognise and name common 2D and 3D shapes
- Describe position, direction and movement, including  $\frac{1}{2}$ ,  $\frac{1}{4}$  and  $\frac{3}{4}$  turns

# The new National Curriculum 2014 - Year 2

## ENGLISH

### Reading

- Develop phonics until decoding is secure and reading fluent
- Read by blending sounds
- Read: words of 2+ syllables containing taught GPCs; words with common suffixes; common 'exception' words
- Read frequently encountered words quickly and accurately
- Read and reread books at appropriate level
- Discuss fiction, non-fiction and poetry beyond own reading level
- Discuss order of events
- Become familiar with and retell stories
- Read non-fiction books structured in different ways
- Recognise simple recurring literary language
- Discuss word meanings and favourite words/phrases
- Learn more poems by heart, reciting some
- Draw on prior knowledge to make sense of texts
- Check for sense and correct reading errors
- Make inferences and predictions
- Ask and answer questions
- Discuss books, poems and other texts
- Explain their understanding of texts

### Writing

- Spell by segmenting into phonemes
- Learn new ways of spelling phonemes and some common homophones
- Spell common 'exception' words and more contractions
- Use the singular possessive apostrophe
- Distinguish between homophones and near-homophones
- Add suffixes to spell longer words
- Learn and apply spelling rules in Appendix 1

## LANGUAGES

- Not required at Key Stage 1

- Write simple dictated sentences
- Use letters and spaces of appropriate size
- Start using pre-joining strokes
- Write in different genres and for different purposes
- Plan ideas for writing
- Record ideas sentence by sentence
- Make simple additions and changes after proofreading
- Learn and use the grammar and terminology in Appendix 2
- In own writing use: sentences with different forms; expanded noun phrases; present and past tenses correctly; subordination and co-ordination; some features of written Standard English

### Spoken language

- Listen and respond appropriately
- Ask relevant questions
- Build vocabulary
- Articulate and justify own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate actively in conversations
- Speculate, hypothesise and explore ideas
- Speak clearly and fluently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Keep listeners interested
- Explore different viewpoints
- Communicate effectively using appropriate register

## ART AND DESIGN (KS1)

- Use a range of materials
- Use drawing, painting and sculpture
- Develop techniques of colour, pattern, texture, line, shape, form and space
- Learn about a range of artists, craft makers and designers

## SCIENCE

- Differentiate between living, dead and non-living
- Identify living things in their habitats; know they are suited to their habitat and are interdependent
- Describe feeding relationships using simple food chains
- Observe seeds and bulbs growing
- Understand plants need water, light and warmth
- Know all animals have offspring that grow into adults
- Understand animals need water, food and air
- Describe the importance for humans of exercise, balanced diet and hygiene
- Identify and compare uses of materials
- Explore changing the shape of solid objects

### Working scientifically

- Ask simple questions
- Observe closely
- Perform simple tests
- Identify and classify
- Suggest answers to questions
- Gather and record data

## MUSIC (KS1)

- Sing songs and speak chants and rhymes
- Play tuned and untuned instruments musically
- Listen to and understand a range of live and recorded music
- Make and combine sounds musically

## DESIGN AND TECHNOLOGY (KS1)

- Design purposeful, functional and appealing products
- Generate, develop, model and communicate ideas
- Select from and use a range of tools and materials
- Evaluate existing products and own ideas and products
- Build and improve structures
- Explore and use mechanisms (e.g. levers, wheels)
- Prepare dishes using principles of a healthy diet
- Understand where food comes from

## COMPUTING (KS1)

- Understand use of algorithms
- Write and test simple programs
- Use logical reasoning to make predictions
- Create, organise, store, manipulate and retrieve digital content
- Recognise uses of IT beyond school
- Communicate online safely and respectfully

## PHYSICAL EDUCATION (KS1)

- Master and apply basic movement skills
- Participate in team games
- Perform dances using simple movements
- (KS1 or KS2) Swim at least 25 metres; use a range of strokes; perform self-rescue

## GEOGRAPHY (KS1)

- Name and locate the world's continents and oceans; the UK's countries, seas and capitals
- Compare a UK locality with one outside Europe
- Identify weather patterns in the UK; locate hot/cold areas of the world
- Use basic geographical vocabulary to describe physical and human features
- Use world maps, atlases and globes
- Use the four points of the compass and locational/directional language
- Recognise features on aerial photos and plans; devise a map with symbols and key
- Study the immediate environment

## MATHEMATICS

### Number

- Count in 2s, 3s, 5s and 10s
- Use place value
- Identify, represent and estimate numbers
- Compare and order numbers 0 to 100; use  $<$   $>$   $=$
- Read and write numbers to at least 100 in numerals and words
- Know number facts to 20 and derive related facts to 100
- Add and subtract using concrete, pictorial and mental methods
- Recognise addition is commutative
- Recognise and apply inverse relationship between addition and subtraction
- Know 2, 5 and 10 times tables; write facts using  $\times$ ,  $\div$  and  $=$
- Recognise multiplication is commutative
- Recognise, find, name and write  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$ , and  $\frac{3}{4}$
- Recognise equivalence of  $\frac{2}{4}$  and  $\frac{1}{2}$
- Solve problems related to place value

### Measurement

- Choose and use appropriate standard units
- Compare and order length, mass, volume/capacity; record using  $<$ ,  $>$  and  $=$
- Use  $\pounds$  and p signs; combine coins to a given value and find different combinations
- Solve problems involving adding/subtracting money
- Compare and order time intervals
- Tell time to nearest five minutes
- Know the number of minutes in an hour/hours in a day

### Geometry

- Identify and describe 2D and 3D shapes
- Identify 2D shapes on surfaces of 3D shapes
- Compare and sort common 2D and 3D shapes and everyday objects
- Arrange shapes in patterns/sequences
- Use vocabulary of position, direction and movement

### Statistics

- Interpret and draw simple pictograms, tally charts, block diagrams and tables
- Ask and answer comparison and totalling questions

# The new National Curriculum 2014 - Year 3

## ENGLISH

### Reading

- Apply knowledge to read and understand new words
- Read further 'exception' words
- Listen to and discuss a range of fiction, poetry, plays and non-fiction
- Read books structured in different ways and read for a range of purposes
- Use dictionaries to check meaning
- Read a wide range of texts, identifying themes and conventions, and retelling some orally
- Prepare poems and plays to perform
- Discuss interesting words/phrases
- Recognise some forms of poetry
- Check own understanding of reading; ask questions to improve understanding
- Draw inferences and make predictions
- Identify and summarise main ideas
- Identify how language, structure and presentation contribute to meaning
- Retrieve and record information from non-fiction
- Discuss reading with others

### Writing

- Spell: words with prefixes and suffixes; homophones; commonly misspelt words
- Use possessive apostrophes with plurals
- Use a dictionary to check spellings
- Write simple dictated sentences
- Increase legibility, consistency and quality of handwriting; use joins appropriately
- Prepare to write by: studying existing texts; discussing and recording ideas; rehearsing sentences orally; building up vocabulary and a range of sentence structures

- When writing: use paragraphs; create settings, characters and plot; use simple organisational devices
- Assess effectiveness of own and others' writing and propose changes to improve consistency
- Proofread spelling and punctuation
- Read own writing aloud
- Use: range of connectives; present perfect tense; nouns/pronouns appropriately
- Use and punctuate: fronted adverbials; direct speech
- Learn and use grammar and terminology in Appendix 2

### Spoken language

- Listen and respond appropriately
- Ask relevant questions
- Build vocabulary
- Articulate and justify own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate actively in conversations
- Speculate, hypothesise and explore ideas
- Speak clearly and fluently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Keep listeners interested
- Explore different viewpoints
- Communicate effectively using appropriate register

## SCIENCE

- Study flowering plants: plant parts, requirements for life/growth, how water is transported, and role of flowers in life cycle
- Identify that animals, including humans, need the right balance of nutrition
- Identify why humans and some other animals have skeletons and muscles
- Classify rock types
- Describe fossilisation in simple terms
- Recognise that soils are made from rocks and organic matter
- Know that you need light to see and that darkness is the absence of light
- Notice that light is reflected from surfaces
- Know that it is dangerous to look at the Sun
- Know shadows are formed when light is blocked
- Find patterns in changes of shadow size
- Compare how things move on different surfaces
- Know some forces act only on contact, but magnetism acts at a distance
- Observe magnetic attraction and repulsion
- Sort materials into magnetic and non-magnetic
- Describe magnets as having two poles and predict whether two magnets will attract or repel each other

### Working scientifically

- Ask questions and use enquiries to answer them
- Set up simple practical enquiries and fair tests
- Observe carefully and systematically, taking accurate measurements
- Collect, record, sort and present data
- Record and report on findings in various ways
- Use results to draw conclusions, make predictions, suggest improvements and ask further questions
- Identify differences, similarities and changes
- Use scientific evidence

## DESIGN AND TECHNOLOGY (KS2)

- Develop products fit for purpose
- Communicate design ideas in various ways
- Use a wider range of tools and materials
- Evaluate existing products and improve own products
- Build and strengthen more complex structures
- Use mechanical, electrical and computing systems in own products
- Understand and apply principles of a healthy diet
- Prepare and cook mainly savoury dishes
- Understand seasonality

## COMPUTING (KS2)

- Design, write and debug programs
- Use sequence, selection and repetition in programs
- Use logical reasoning
- Understand computer networks
- Use search technologies effectively
- Create a range of digital products (including for handling data)
- Use technology safely, respectfully and responsibly

## PHYSICAL EDUCATION (KS2)

- Use running, jumping, catching and throwing in isolation and in combination
- Play competitive games, modified as appropriate
- Develop flexibility and control in gym, dance and athletics
- Take part in outdoor adventurous activities
- Compare performances to achieve personal bests
- (KS1 or KS2) Swim at least 25 metres; use a range of strokes; perform self-rescue

## GEOGRAPHY (KS2)

- Locate the world's countries, focusing on Europe and the Americas
- Study UK counties, cities, regions, physical features, land use and changes over time
- Identify the lines and zones on a globe, including time zones
- Compare a UK region with one in Europe and one in the Americas
- Understand key aspects of physical and human geography
- Use maps, atlases, globes and digital/computer mapping
- Use eight points of the compass, four-/six-figure grid references, symbols and keys
- Use a range of methods to study the local area

## MATHEMATICS

### Number

- Count from 0 in 4s, 8s, 50s and 100s; find 10 or 100 more/less
- Numbers to 1000: recognise place value of each digit; compare and order; read and write in numerals and words
- Identify, represent and estimate numbers in different ways
- Mentally add and subtract ones, tens or hundreds to/from numbers with up to three digits
- Add and subtract numbers with up to three digits in columns
- Estimate answers and check using inverse operations
- Learn 3, 4 and 8 times tables
- Multiply and divide two-digit by one-digit numbers
- Use tenths and count in tenths
- Recognise, find and write fractions of sets of objects
- Recognise and use fractions as numbers
- Recognise some equivalent fractions
- Add/subtract fractions with the same denominator up to  $<1$
- Order unit fractions and fractions with common denominators

## HISTORY (KS2)

- Changes in Britain from Stone Age to Bronze Age
- Roman Empire and its impact on Britain
- Settlement of Britain by Anglo-Saxons and Scots
- Vikings and Anglo-Saxons in Britain (to 1066)
- An aspect of British history extending past 1066
- Local history study
- Overview of earliest civilizations and in-depth study of one (Ancient Sumer, Indus Valley, Ancient Egypt or Shang Dynasty)
- Ancient Greece
- A non-European society (early Islamic, Mayan or Benin)

- Solve problems relating to all aspects of number

### Measurement

- Measure and calculate with metric units
- Measure perimeter of simple 2D shapes
- Add/subtract money in context
- Tell analogue time (including Roman numerals and 12- and 24-hour clocks)
- Estimate and read time to nearest minute; record and compare times; use time vocabulary
- Know the number of seconds in a minute and days in each month/year/leap year
- Compare durations of events

### Geometry

- Draw 2D and make 3D shapes
- Recognise angles as a property of a shape or a description of a turn
- Identify right angles; use them to describe fractions of a turn; compare other angles to them
- Identify horizontal, vertical, perpendicular and parallel lines

### Statistics

- Interpret, draw and answer one- and two-step questions about bar charts, pictograms and tables

## LANGUAGES (KS2)

- Listen and respond
- Explore language through stories, songs, poems and rhymes
- Converse; ask and answer questions; express opinions; seek help
- Speak in sentences
- Develop accurate pronunciation
- Express ideas and describe things orally and in writing
- Understand written words and phrases
- Broaden vocabulary
- Understand basic grammar

## ART AND DESIGN (KS2)

- Use sketchbooks to collect, record and evaluate ideas
- Improve skills in drawing, painting and sculpture, using various materials
- Learn about great artists, architects and designers

## MUSIC (KS2)

- Use voice and instruments with increasing accuracy, control and expression
- Improvise and compose music
- Listen with attention to detail
- Use and understand musical notation
- Appreciate a wide range of live and recorded music
- Develop understanding of musical history

# The new National Curriculum 2014 - Year 4

## ENGLISH

### Reading

- Apply knowledge to read and understand new words
- Read further 'exception' words
- Listen to and discuss a range of fiction, poetry, plays and non-fiction
- Read books structured in different ways and read for a range of purposes
- Use dictionaries to check meaning
- Read a wide range of texts, identifying themes and conventions, and retelling some orally
- Prepare poems and plays to perform
- Discuss interesting words/phrases
- Recognise some forms of poetry
- Check own understanding of reading; ask questions to improve understanding
- Draw inferences and make predictions
- Identify and summarise main ideas
- Identify how language, structure and presentation contribute to meaning
- Retrieve and record information from non-fiction
- Discuss reading with others

### Writing

- Spell: words with prefixes and suffixes; homophones; commonly misspelt words
- Use possessive apostrophes with plurals
- Use a dictionary to check spellings
- Write simple dictated sentences
- Increase legibility, consistency and quality of handwriting; use joins appropriately
- Prepare to write by: studying existing texts; discussing and recording ideas; rehearsing sentences orally; building up vocabulary and a range of sentence structures
- When writing: use paragraphs; create settings, characters and plot; use simple organisational devices
- Assess effectiveness of own and others' writing and propose changes to improve consistency

- Proofread spelling and punctuation
- Read own writing aloud
- Use: a range of connectives; present perfect tense; nouns/pronouns appropriately
- Use and punctuate: fronted adverbials; direct speech
- Learn and use grammar and terminology in Appendix 2

### Spoken language

- Listen and respond appropriately
- Ask relevant questions
- Build vocabulary
- Articulate and justify own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate actively in conversations
- Speculate, hypothesise and explore ideas
- Speak clearly and fluently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Keep listeners interested
- Explore different viewpoints
- Communicate effectively using appropriate register

## SCIENCE

- Classify living things
- Recognise that changing environments can pose dangers to living things
- Describe simple functions in the human digestive system
- Identify different types of human teeth and their functions
- Construct and interpret food chains
- Identify and compare solids, liquids and gases
- Explore changes of state; relate to changes of temperature
- Identify the part played by evaporation and condensation in the water cycle
- Explore and identify how sound is made through vibration, and how to change pitch and volume of sounds
- Know that we hear sounds when vibrations travel through a medium to the ear, and that sounds get fainter with distance
- Identify appliances that run on electricity
- Construct a simple series electrical circuit
- Identify whether or not a lamp will light
- Recognise that a switch opens and closes a circuit
- Recognise common conductors and insulators; associate metals with being good conductors

### Working scientifically

- Ask questions and use enquiries to answer them
- Set up simple practical enquiries and fair tests
- Observe carefully and systematically, taking accurate measurements
- Collect, record, sort and present data
- Record and report on findings in various ways
- Use results to draw conclusions, make predictions, suggest improvements and ask further questions
- Identify differences, similarities and changes
- Use scientific evidence

## DESIGN AND TECHNOLOGY (KS2)

- Develop products fit for purpose
- Communicate design ideas in various ways
- Use a wider range of tools and materials
- Evaluate existing products and improve own products
- Build and strengthen more complex structures
- Use mechanical, electrical and computing systems in own products
- Understand and apply principles of a healthy diet
- Prepare and cook mainly savoury dishes
- Understand seasonality

## GEOGRAPHY (KS2)

- Locate the world's countries, focusing on Europe and the Americas
- Study UK counties, cities, regions, physical features, land use and changes over time
- Identify the lines and zones on a globe, including time zones
- Compare a UK region with one in Europe and one in the Americas
- Understand key aspects of physical and human geography
- Use maps, atlases, globes and digital/computer mapping
- Use eight points of the compass, four- / six-figure grid references, symbols and keys
- Use a range of methods to study the local area

## HISTORY (KS2)

- Changes in Britain from Stone Age to Bronze Age
- Roman Empire and its impact on Britain
- Settlement of Britain by Anglo-Saxons and Scots
- Vikings and Anglo-Saxons in Britain (to 1066)
- An aspect of British history extending past 1066
- Local history study
- Overview of earliest civilizations and in-depth study of one (Ancient Sumer, Indus Valley, Ancient Egypt or Shang Dynasty)
- Ancient Greece
- A non-European society (early Islamic, Mayan or Benin)

## LANGUAGES (KS2)

- Listen and respond
- Explore language through stories, songs, poems and rhymes
- Converse; ask and answer questions; express opinions; seek help
- Speak in sentences
- Develop accurate pronunciation
- Express ideas and describe things orally and in writing
- Understand written words and phrases
- Broaden vocabulary
- Understand basic grammar

## ART AND DESIGN (KS2)

- Use sketchbooks to collect, record and evaluate ideas
- Improve skills in drawing, painting and sculpture, using various materials
- Learn about great artists, architects and designers

## MUSIC (KS2)

- Use voice and instruments with increasing accuracy, control and expression
- Improvise and compose music
- Listen with attention to detail
- Use and understand musical notation
- Appreciate a wide range of live and recorded music
- Develop an understanding of musical history

## PHYSICAL EDUCATION (KS2)

- Use running, jumping, catching and throwing in isolation and in combination
- Play competitive games, modified as appropriate
- Develop flexibility and control in gym, dance and athletics
- Take part in outdoor adventurous activities
- Compare performances to achieve personal bests
- (KS1 or KS2) Swim at least 25 metres; use a range of strokes; perform self-rescue

## COMPUTING (KS2)

- Design, write and debug programs
- Use sequence, selection and repetition in programs
- Use logical reasoning
- Understand computer networks
- Use search technologies effectively
- Create a range of digital products (including for handling data)
- Use technology safely, respectfully and responsibly

## MATHEMATICS

### Number

- Count in multiples of 6, 7, 9, 25 and 1000
- Find 1000 more/less
- Count backwards to include negative numbers
- Recognise place value of each digit in a four-digit number
- Order and compare numbers beyond 1000
- Identify, represent and estimate numbers in different ways
- Round numbers to nearest 10, 100 or 1000
- Solve problems with larger positive numbers
- Use Roman numerals to 100 (C)
- Add and subtract numbers with up to four digits in columns
- Estimate and use inverse operations to check answers
- Solve two-step addition and subtraction problems
- Know all tables to 12 x 12
- Multiply and divide mentally
- Use factor pairs and commutativity in mental calculations
- Use standard short multiplication to multiply two- and three-digit numbers by a one-digit number
- Solve problems involving multiplying and dividing
- Recognise common equivalent fractions
- Count up and down in hundredths
- Solve problems involving increasingly harder fractions
- Add and subtract fractions with common denominators

- Recognise and write decimal equivalents of any number of tenths and hundredths and of  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$
- Find the effect of dividing a one- or two-digit number by 10 and 100
- Round decimals with one dp to whole numbers
- Compare numbers with same number of decimal places up to two dp
- Solve measure and money problems involving fractions and decimals

### Measurement

- Convert between units of measure
- Measure and calculate perimeter of right-angled shapes
- Find area of right-angled shapes by counting squares
- Estimate, compare and calculate different measures
- Read, write and convert times between analogue and digital and between 12- and 24-hour
- Solve time conversion problems

### Geometry

- Compare and classify 2D shapes, including quadrilaterals and triangles
- Identify, compare and order acute, obtuse and right angles
- Identify lines of symmetry in 2D shapes
- Complete a simple symmetric figure
- Use first quadrant coordinates
- Introduce simple translations
- Plot points and draw sides to complete a polygon

### Statistics

- Use bar charts, pictograms, tables and time graphs

# The new National Curriculum 2014 - Year 5

## ENGLISH

### Reading

- Apply knowledge of morphology and etymology when reading new words
- Read and discuss a broad range of texts
- Read books structured in different ways; read for a range of purposes
- Recommend books to others
- Identify and discuss themes and conventions and make comparisons
- Learn a wider range of poetry by heart
- Prepare poems/plays to read aloud and perform
- Check for sense and ask questions to improve understanding
- Draw inference and make predictions
- Summarise main ideas
- Identify how structure and presentation contribute to meaning
- Discuss authors' use of language
- Distinguish between fact and opinion
- Retrieve, record and present information from non-fiction
- Discuss books they read and hear
- Explain and discuss their understanding, including through formal presentations and debates
- Justify their views

### Writing

- Spell: words with prefixes, suffixes and silent letters; homophones and other confusing words; using knowledge of morphology and etymology
- Use a thesaurus/dictionary to check meanings/spellings
- Write legibly, fluently and with increasing speed
- Plan writing: to suit audience and purpose; noting and developing initial ideas; considering how authors develop characters and settings
- When writing: select appropriate grammar and vocabulary; use linking, organisational and presentational devices; in narratives, use dialogue and develop character, setting and atmosphere
- Précis longer passages
- Assess effectiveness of own and others' writing and propose changes to enhance effect and clarify meaning

- Check writing for: correct and consistent tenses; subject/verb agreement; distinction between spoken/written language; appropriate register; correct spelling and punctuation
- Perform own compositions
- Understand formal language structures, including subjunctive
- Use: expanded noun phrases; modal and passive verbs; relative clauses
- Use: commas and hyphens to avoid ambiguity; brackets, dashes and commas for parenthesis; semi colons, colons or dashes between independent clauses; colons in lists; punctuation of bullet points
- Learn and use grammar and terminology in Appendix 2

### Spoken language

- Listen and respond appropriately
- Ask relevant questions
- Build vocabulary
- Articulate and justify own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate actively in conversations
- Speculate, hypothesise and explore ideas
- Speak clearly and fluently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Keep listeners interested
- Explore different viewpoints
- Communicate effectively using appropriate register

## SCIENCE

- Explain life cycle differences in a mammal, amphibian, insect and bird
- Describe reproduction in some plants and animals
- Describe changes as humans develop and age
- Classify materials according to various properties
- Know that some materials dissolve in water to form a solution
- Separate mixtures of materials
- Give reasons for particular uses of everyday materials
- Explore reversible changes and changes that are difficult to reverse
- Describe the movement of Earth and other planets relative to the Sun and of the Moon relative to Earth
- Use Earth's rotation to explain day and night
- Explore the effects of gravity and friction (including air and water resistance)
- Know that some mechanisms magnify forces

### Working scientifically

- Plan different types of enquiry to answer questions
- Take accurate measurements and repeat them if needed
- Record increasingly complex data in various ways
- Use results to make predictions and suggest further tests
- Present findings orally and in writing
- Identify scientific evidence for or against an idea

## DESIGN AND TECHNOLOGY (KS2)

- Develop products fit for purpose
- Communicate design ideas in various ways
- Use a wider range of tools and materials
- Evaluate existing products and improve own products
- Build and strengthen more complex structures
- Use mechanical, electrical and computing systems in own products
- Understand and apply principles of a healthy diet
- Prepare and cook mainly savoury dishes
- Understand seasonality

## GEOGRAPHY (KS2)

- Locate the world's countries, focusing on Europe and the Americas
- Study UK counties, cities, regions, physical features, land use and changes over time
- Identify the lines and zones on a globe, including time zones
- Compare a UK region with one in Europe and one in the Americas
- Understand key aspects of physical and human geography
- Use maps, atlases, globes and digital/computer mapping
- Use eight points of the compass, four- / six-figure grid references, symbols and keys
- Use a range of methods to study the local area

## HISTORY (KS2)

- Changes in Britain from Stone Age to Bronze Age
- Roman Empire and its impact on Britain
- Settlement of Britain by Anglo-Saxons and Scots
- Vikings and Anglo-Saxons in Britain (to 1066)
- An aspect of British history extending past 1066
- Local history study
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- Ancient Greece
- A non-European society (early Islamic, Mayan or Benin)

## LANGUAGES (KS2)

- Listen and respond
- Explore language through stories, songs, poems and rhymes
- Converse; ask and answer questions; express opinions; seek help
- Speak in sentences
- Develop accurate pronunciation
- Express ideas and describe things orally and in writing
- Understand written words and phrases
- Broaden vocabulary
- Understand basic grammar

## ART AND DESIGN (KS2)

- Use sketchbooks to collect, record and evaluate ideas
- Improve skills in drawing, painting and sculpture, using various materials
- Learn about great artists, architects and designers

## MUSIC (KS2)

- Use voice and instruments with increasing accuracy, control and expression
- Improvise and compose music
- Listen with attention to detail
- Use and understand musical notation
- Appreciate a wide range of live and recorded music
- Develop understanding of musical history

## PHYSICAL EDUCATION (KS2)

- Use running, jumping, catching and throwing in isolation and in combination
- Play competitive games, modified as appropriate
- Develop flexibility and control in gym, dance and athletics
- Take part in outdoor adventurous activities
- Compare performances to achieve personal bests
- (KS1 or KS2) Swim at least 25 metres; use a range of strokes; perform self-rescue

## COMPUTING (KS2)

- Design, write and debug programs
- Use sequence, selection and repetition in programs
- Use logical reasoning
- Understand computer networks
- Use search technologies effectively
- Create a range of digital products (including for handling data)
- Use technology safely, respectfully and responsibly

## MATHEMATICS

### Number

- Numbers to at least 1 million: read, write, order, compare; know place value; round to nearest power of 10; count on/back in powers of 10
- Use negative whole numbers in context
- Roman numerals: read numbers to 1000 and years
- Add and subtract whole numbers with more than four digits using column methods
- Mentally add and subtract increasingly large numbers
- Use rounding to check answers
- Identify multiples, factors, prime numbers, prime factors and composite numbers
- Find primes to 100; recall primes to 19
- Multiply numbers up to four digits by a one- or two-digit number using formal written method
- Multiply and divide numbers mentally
- Divide numbers up to four digits by a one-digit number using formal written method; interpret remainders
- Multiply and divide by powers of 10
- Use square and cube numbers; use <sup>2</sup> and <sup>3</sup> notation
- Compare and order fractions
- Identify, name and write equivalent fractions
- Use mixed numbers and improper fractions and convert between them
- Add and subtract fractions with common/related denominators
- Multiply fractions by whole numbers
- Write decimals as fractions
- Recognise and use thousandths and relate to tenths, hundredths and decimal equivalents

- Order and round decimal numbers
- Recognise and understand % sign; link percentages to fractions and decimals
- Solve problems involving all aspects of number, including multi-step problems

### Measurement

- Convert between metric units and between metric and imperial units
- Measure and calculate the perimeter of composite right-angled shapes
- Calculate and compare area of rectangles; estimate area of irregular shapes
- Estimate volume and capacity
- Use four operations to solve measure problems using decimal notation
- Solve problems involving converting between units of time
- Use all four operations to solve measure problems

### Geometry

- Identify 3D shapes from 2D representations
- Measure, estimate, compare and draw angles in degrees
- Identify angles: at a point (whole turn); on a straight line (half turn); other multiples of 90°
- Finding missing lengths and angles in rectangles
- Distinguish between regular and irregular polygons
- Reflect and translate shapes

### Statistics

- Solve problems based on line graphs
- Complete, read and interpret information in tables

# The new National Curriculum 2014 - Year 6

## ENGLISH

### Reading

- Apply knowledge of morphology and etymology when reading new words
- Read and discuss a broad range of texts
- Read books structured in different ways; read for a range of purposes
- Recommend books to others
- Identify and discuss themes and conventions and make comparisons
- Learn a wider range of poetry by heart
- Prepare poems/plays to read aloud and perform
- Check for sense and ask questions to improve understanding
- Draw inference and make predictions
- Summarise main ideas
- Identify how structure and presentation contribute to meaning
- Discuss authors' use of language
- Distinguish between fact and opinion
- Retrieve, record and present information from non-fiction
- Discuss books they read and hear
- Explain and discuss their understanding, including through formal presentations and debates
- Justify their views

### Writing

- Spell: words with prefixes, suffixes and silent letters; homophones and other confusing words; using knowledge of morphology and etymology
- Use a thesaurus/dictionary to check meanings/spellings
- Write legibly, fluently and with increasing speed
- Plan writing: to suit audience and purpose; noting and developing initial ideas; considering how authors develop characters and settings
- When writing: select appropriate grammar and vocabulary; use linking, organisational and presentational devices; in narratives use dialogue and develop character, setting and atmosphere
- Précis longer passages
- Assess effectiveness of own and others' writing and propose changes to enhance effect and clarify meaning

- Check writing for: correct and consistent tenses; subject/verb agreement; distinction between spoken/written language; appropriate register; correct spelling and punctuation
- Perform own compositions
- Understand formal language structures, including subjunctive
- Use: expanded noun phrases; modal and passive verbs; relative clauses
- Use: commas and hyphens to avoid ambiguity; brackets, dashes and commas for parenthesis; semi colons, colons or dashes between independent clauses; colons in lists; punctuation of bullet points
- Learn and use grammar and terminology in Appendix 2

### Spoken language

- Listen and respond appropriately
- Ask relevant questions
- Build vocabulary
- Articulate and justify own ideas
- Describe, explain and narrate for different purposes; express feelings
- Participate actively in conversations
- Speculate, hypothesise and explore ideas
- Speak clearly and fluently in Standard English
- Take part in discussions, presentations, performances, role-play, improvisations and debates
- Keep listeners interested
- Explore different viewpoints
- Communicate effectively using appropriate register

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## ART AND DESIGN (KS2)

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## SCIENCE

- Explore biological classification in more detail
- Identify main parts of the human circulatory system
- Explore the impact of diet, exercise, drugs and lifestyle on health
- Describe how nutrients are transported in humans and other animals
- Know living things have changed over time
- Know offspring are similar but not identical to parents
- Identify how living things adapt and how this may lead to evolution
- Explore how light behaves (travelling in straight lines, reflection, refraction, shadow formation)
- Associate brightness of lamp or volume of buzzer with number and voltage of cells
- Compare and give reasons for variations in how circuit components function
- Draw circuit diagrams using recognised symbols

### Working scientifically

- Plan different types of enquiry to answer questions
- Take accurate measurements and repeat them if needed
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## MATHEMATICS

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- Numbers to 10 million: read, write, order, compare; know place value; round to a given degree of accuracy
- Use negative numbers in context; calculate intervals across zero
- Multiply and divide numbers up to four digits by a two-digit whole number using formal written methods; interpret remainders
- Perform challenging mental calculations
- Identify common factors, common multiples and primes
- Use order of operations
- Use estimation to check answers
- Simplify, compare and order fractions
- Use equivalents to add and subtract fractions
- Multiply simple fractions together and divide fractions by whole numbers
- Associate a fraction with division and calculate decimal fraction equivalents
- Know place value to three decimal places; multiply and divide numbers by 10, 100 and 1000
- Multiply one-digit numbers with up to two dp by whole numbers
- Use written division for answers with up to two dp
- Recall and use equivalences between simple fractions, decimals and percentages
- Solve problems involving all aspects of number, including multi-step problems

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### Ratio and proportion

- Solve problems involving: relative sizes of two quantities; percentages; similar shapes; unequal sharing and grouping

### Algebra

- Use simple formulae
- Generate and describe linear number sequences
- Express missing number problems algebraically
- Find pairs of numbers that satisfy an equation with two unknowns
- Enumerate possibilities of combinations of two variables

### Measurement

- Use a range of measures and conversions, using decimals up to three dp
- Convert between miles and kilometres
- Know that shapes with the same area can have different perimeters and vice versa
- Use area and volume formulae
- Calculate area of triangles and parallelograms
- Calculate, estimate and compare volumes of cubes and cuboids

### Geometry

- Draw 2D shapes given dimensions and angles
- Describe and build simple 3D shapes
- Classify shapes by properties
- Understand circle terminology
- Know and use angle rules to find unknown angles
- Describe positions on full coordinate grid
- Translate and reflect shapes using all four quadrants

### Statistics

- Use pie charts and line graphs to solve problems
- Calculate mean averages