

Ma

KEY STAGE

1

LEVELS

2 & 3

2007

Level 2 and level 3

Mathematics tests

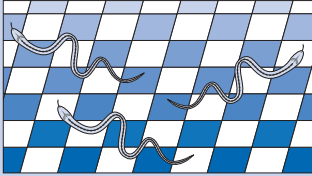
Teacher's guide

Level 2

Key stage I
Mathematics booklet
 2007

Name

Score Level and grade



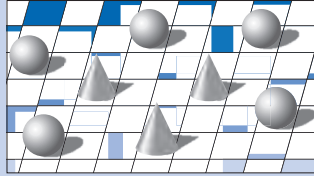
Level 2

Level 3

Key stage I
Mathematics booklet
 2007

Name

Score Level



Level 3

department for

education and skills

creating opportunity, releasing potential, achieving excellence



2007

First published in 2007

© Qualifications and Curriculum Authority 2007

Reproduction, storage, adaptation or translation, in any form or by any means, of this publication is prohibited without prior written permission of the publisher, unless within the terms of licences issued by the Copyright Licensing Agency. Excerpts may be reproduced for the purpose of research, private study, criticism or review, or by educational institutions solely for educational purposes, without permission, provided full acknowledgement is given.

Produced in Great Britain by the Qualifications and Curriculum Authority under the authority and superintendence of the Controller of Her Majesty's Stationery Office and Queen's Printer of Acts of Parliament.

The Qualifications and Curriculum Authority is an exempt charity under Schedule 2 of the Charities Act 1993.

Qualifications and Curriculum Authority
83 Piccadilly
London
W1J 8QA
www.qca.org.uk

Contents

Background information	2
Specific guidance	6
Administering the level 2 test	11
Marking the level 2 test	20
Mark scheme for the level 2 test	22
Finding the level	30
Administering the level 3 test	31
Marking the level 3 test	39
Mark scheme for the level 3 test	41
Finding the level	50
Age standardised scores	51

Assistance for the written questions

This guidance is provided in a separate booklet.

Background information

Children to be tested

Teachers have flexibility about which tests are administered and when the tests are taken. Every child should be assessed by the use of a task or test, although the use of a task for children who the teacher judges are working below level 1 is optional. As in recent years, teachers may use a task from any previous year. Children who achieve very highly on a task/test, or fail to achieve a level, do not need to be taken on to the next task/test up, or down, if you feel you have enough information on that child to make your overall judgement. The tasks/tests can be administered at any time in the year, as long as you have time to take account of the information gained in your overall assessment.

Structure of the tests

The materials include:

- a level 2 test booklet
- a level 3 test booklet
- administration and marking instructions contained within this *Teacher's guide*
- *Assistance for the written questions* booklet
- grids providing curriculum references for optional analysis of performance.

Each test includes material drawn from the key stage 1 programme of study both for *Number* and for *Shape, space and measures* in the 2000 national curriculum order. The tests also include questions that assess *Using and applying mathematics*. These questions will require children to apply their problem-solving skills, to communicate mathematically and to reason. Questions assessing *Using and applying mathematics* are identified within the mark scheme for each test.

There are two parts to each test. The first part comprises five questions (and one practice question), which total five marks. These questions are to be read aloud to the children by the teacher. The second part comprises 22 or 23 written questions (and one practice question), which total 25 marks.

The questions in each test have been ordered approximately by their degree of difficulty, as informed by outcomes of the trials of the tests. Each test was developed in consultation with groups of year 2 classroom teachers, and was subjected to three types of trial with a nationally representative sample including over 3,000 children. Children in one particular class or school may find the tests easier or harder than this sample.

It is important that all children are given an opportunity to attempt as many questions as they can in the written part of the tests. An evaluation study of the performance of a group of children who just attained level 2 in an earlier test showed that each of the more difficult questions, towards the end of the level 2 test, was answered correctly by at least one child in this group. If a child is unable to cope with one written question, he or she should be encouraged to move on to the next question.

Timing

It should not be necessary for either test to be completed in more than two sessions. These sessions should normally take place on the same day or on consecutive days. If they take place on the same day, children may benefit from a break after about 30 minutes.

There is no time limit for any part of the tests. Trialling has shown that most children demonstrate what they can do in about 45 minutes, after a short introduction. You should use your discretion to give the children as much time as they need to finish all the oral and written questions they can do.

Grouping children for the test

It is anticipated that the level 2 test and the level 3 test will be administered on separate occasions. Both the oral and written parts of each test can be administered to all the children at the appropriate levels together, in small groups or individually. For the written part of the tests, you may give help with reading (see the booklet *Assistance for the written questions*). You may also read all the questions to groups or individuals. Your decision about grouping, therefore, should reflect the needs of the children in your class and their ability to work independently. Further guidance on grouping for, and reading, the tests is included on the next page.

It is possible, but not recommended, that the level 2 test and the level 3 test be administered to different groups of children simultaneously. If this method of administration is chosen, the children taking either test will need to complete separately the oral questions and the practice written question for their test, before completing the written questions simultaneously. The oral questions should be completed before starting the written questions. Children taking the level 3 test should not have access to structured apparatus, number lines or 100 squares during any part of the test.

Assistance

The tests do not require the use of staff beyond those normally available in the classroom. However, they may be administered, under the direction of the teacher, by any competent or informed person such as a language support teacher, a teaching assistant or special educational needs support staff. These staff should have copies of *Assistance for the written questions*. The teacher, however, remains responsible for the assessments. Parents of children in the class should not administer the tests.

Detailed guidance on supporting the children during the level 2 test is provided on pages 14–17 for the oral questions and pages 18–19 for the written questions. Guidance for the level 3 test is provided on pages 33–36 for the oral questions and pages 37–38 for the written questions. Further guidance for each test is provided in *Assistance for the written questions*. **Any person** administering the test should be familiar with this guidance and have it to hand during any administration of the tests.

Please note that teachers are allowed to read numbers in sentences in all questions on the level 2 and level 3 tests. More detailed guidance is provided in *Assistance for the written questions*. They are not, however, allowed to read calculations such as ' $25 + 13 =$ ', because these questions provide an opportunity to assess children's ability to read and interpret numbers and symbols.

Reading the test

If you judge it appropriate, you may go through a whole test, reading out each question to a group and waiting for the children to write their answers before continuing (the ‘look and listen’ method). This is a legitimate way to administer the tests to children who would otherwise have difficulties in accessing the tests. **It is, however, unlikely to be the best method for whole-class administration, as the tests would then need to be read out to suit the pace of the slowest child.** This would mean that children who wanted to work more quickly could become bored with waiting and possibly not demonstrate their best attainment. Some research that QCA has carried out has shown that fluent readers can sometimes perform better if helped by the ‘look and listen’ technique, as they can otherwise skim read questions and misread what needs to be done. However, QCA feels that, in general, children who read fluently can be helped by the teacher stressing how important it is that the children:

- ask for help to read unfamiliar text
- check that they have read questions correctly
- check their working out and answers.

Nevertheless, QCA recognises that teachers are in the best position to judge whether fluent readers would or would not benefit from ‘look and listen’.

Age standardised scores

The tables of age standardised scores for the tests are contained within this *Teacher’s guide*. The use of these tables remains optional.

Optional grid for test analysis

Also provided are grids giving the curriculum references for each question in the tests, which will allow teachers, if they wish, to analyse the performance of children in their class.

Specific guidance

You can be flexible in your arrangements for the tests **as long as any adaptations do not invalidate the assessments**. The range of children's needs is such that it is neither sensible nor possible to provide detailed advice to cover every individual circumstance. You should use your professional judgement and your knowledge of individual children to decide how best to make the tests accessible to all children while maintaining the rigour of the assessment.

Examples of permissible adaptations include:

- using tactile shapes and number cards
- photocopying onto coloured paper
- enhancing shading, and/or emboldening lines on diagrams, charts and graphs
- cutting out, enlarging, embossing or mounting diagrams
- using adhesive to attach materials to a table
- using mechanical and technological aids, eg computers but not calculators
- rephrasing parts of the written questions as indicated in *Assistance for the written questions*.

There may be some children who have difficulty with the test layout and procedures. These children may be willing to ask for help, and you will be able to ensure they receive the support they need. However, other children may be reluctant to ask. As well as offering reassurance to the whole group, you may need to be active in watching for children who are having problems with reading or with writing responses.

Children's responses

Children may convey what they know or understand by any appropriate means: talk, sign, writing, gesture, pictures, models, mime or any combination of these. A wide variety of forms of communication is acceptable.

Children learning English as an additional language

Children who are learning English as an additional language may be given access to the tests in any way that is usual for them. If language support is available, the questions may be translated and children may respond in a language other than English. It is not intended that children are provided with a comprehensive written translation of the papers. As with all children, you may read the questions aloud in English. You may also give a fuller explanation of the context of the questions, **but it is important to ensure that you do not give any additional interpretation of the mathematics or mathematical vocabulary in doing this**.

It is particularly important when assessing children for whom English is an additional language that sufficient time is given for the children to show their best attainment without pressure.

Special educational needs

These tests are designed to be used with all children at the appropriate level, but additional consideration should be given to children with special educational needs. **Usually, the most appropriate conditions for testing will be those in which the children normally work well.**

- You can administer the tests to smaller groups of children or on an individual basis and adopt any strategies suggested in this guide.
- You may describe the pictures to the children or provide them with any objects that convey to them what is in the pictures.
- You may use overhead projector transparencies of any parts of the tests to direct children's attention to what they have to do.

Children with hearing impairments

You should ensure that children with hearing impairments understand the contributions made and questions raised by other children prior to the start of the tests.

Children who have hearing impairments may need particular help with reading. If the child responds orally, the person administering the tests will need to be familiar with the child's speech patterns, to ensure that responses can be understood and recorded accurately.

The questions may be presented to the child in sign language. Any form of sign language may be used for presentation of the questions, and for the child's responses. For children who sign, use should be made of a skilled adult signer/communicator who is familiar with the child and the child's sign language. Since this may not be the teacher, there is a need for the teacher and the signer/communicator to be clear about how the test will be presented.

The nature of some signed languages may demand that some questions are restructured. In restructuring, take care that the signs used neither give clues to the answer or the mathematics to be used, nor cause confusion, and that the questions are restructured only where the sign language itself necessitates it. You may also give a fuller explanation of the context of the questions, but it is important to ensure that you do not give any additional interpretation of the mathematics and mathematical vocabulary in doing this.

The general advice on terms that may and may not be explained should be followed. This advice indicates where signers/communicators may inadvertently advantage or disadvantage the child through choice of sign.

Where a child's responses are made in sign language, care should be taken to note these as precisely as possible, without inferring any meaning that was not clear in the child's signed responses.

The oral questions – additional guidance for teachers of children with hearing impairments

There are five questions (and one practice question) which are to be read aloud to the children by the teacher. These questions come at the beginning of each test but they may be administered to children with hearing impairments during a separate session or at the end of the tests. The oral questions should be administered by a familiar adult whom the child is used to lip-reading or signing with; this could be the child's special support assistant or communicator.

The questions should be administered at an appropriate pace so that children with hearing impairments have enough time to lip-read the question, process the information and find the appropriate part of the page to write the answer. Each question may be signed or written out as a flashcard or projected as an overhead projector transparency if this will make it more accessible for these children. Teachers of hearing impaired children may reword questions using more familiar syntax if necessary. However, considerable care should be taken to avoid altering the nature of the assessment within any question.

For the **oral questions**, the teacher should ensure that the child understands the names used, so that no confusion is caused.

Level 2	Possible amendments for children with hearing impairments
Practice question	No comment.
Question 1	Consider a flashcard showing: <i>double 10</i> Take care in choice of sign for <i>double</i> not to give unfair advantage or disadvantage.
Question 2	No comment.
Question 3	Consider a flashcard showing: <i>60 half</i> Take care in choice of sign for <i>half</i> not to give unfair advantage or disadvantage.
Question 4	Take care in choice of sign for <i>subtract</i> not to give unfair advantage or disadvantage.
Question 5	No comment.

Level 3	Possible amendments for children with hearing impairments
Practice question	No comment.
Question 1	Consider a flashcard showing: 6 5
Question 2	Consider a flashcard showing 6, or ask a child to repeat 6 back to you to ensure understanding. Take care in choice of sign for <i>faces</i> not to give unfair advantage or disadvantage.
Question 3	Consider a flashcard showing: 150 200 multiple of 10
Question 4	Consider a flashcard showing: 6:45 15
Question 5	No comment.

All the oral questions at levels 2 and 3 can be accessed by children with hearing impairments.

All **written questions** can be accessed by children with hearing impairments.

Children with visual impairments

Children with visual impairments may have the test presented to them and make their responses in any way that is usual for them, but care should be taken to avoid altering the nature of the questions. All usual low-vision aids may be used, and real objects may be used where appropriate. Materials may be enlarged, reduced, cut up, brailled, etc, to increase accessibility for individual children, and children may handwrite their answers, use computer facilities, braille or dictate answers to an adult scribe. Help may be given to interpret pictures and diagrams, as long as this does not invalidate the assessment being made.

Braille

The level 2 and level 3 mathematics tests will be available in grade 2 braille, free of charge, from:

Pia
Victoria Street
Cwmbrân
NP44 3YT

Tel: 0870 321 6727
Fax: 0870 321 6429

Minor changes have been made to the text in the braille version. A print version of the modified text for braillists is included with the braille materials. Additional teacher's notes for the braille test will also be included with the materials.

Additional teacher's notes will be included with the modified large print materials.

Modified large print

Teachers of children with special educational needs should be aware of modified large print versions of the tests. Although designed for children with visual impairments, these modified large print papers may be used by other children who have special educational needs. For example, some children with particular physical difficulties may find them more accessible than the unmodified papers. The modified large print papers are produced on A4 size paper in black and white, using bold print, simplified diagrams and illustrations with all extraneous information removed. Copies of the modified large print tests are available free of charge. Examples can be seen on the QCA website at www.qca.org.uk/ages3-14/tests_tasks/2626_6501.html.

Time for the modified tests

Children using braille or modified large print tests are likely to need more time to complete the tests than fully sighted children to take account of their slower reading speeds. You will need to make this clear to children and to organise the classroom as appropriate. You may find it helpful to administer the tests in more than one session, or use rest breaks as appropriate, particularly for children using the braille tests.

Guidance notes

Additional teacher notes have been produced to accompany modified large print and braille versions of the tests. You should refer to these notes before administering and marking the tests.

Children with physical disabilities

Children with physical disabilities may have the tests presented to them, and make their responses, in any way that is usual for them, for example through the teacher scribing dictated answers, the use of enlarged forms or the use of a computer.

Children with emotional and behavioural difficulties

Children with emotional and behavioural difficulties may have problems maintaining their attention for extended periods of time. For this reason, the tests could be administered to this group of children in smaller parts, over a number of sessions, rather than the recommended two sessions.

Administering the level 2 test

Resources

This test is designed for children working at level 2.

For both the oral and written questions, each child will need:

- a copy of the level 2 test booklet
- a pen or pencil
- a centimetre ruler with which they are familiar
- a rubber (optional). You may obtain more useful diagnostic information if you encourage your children to leave their working out on the page and to cross out their mistakes rather than rubbing them out. If rubbers are not provided:
 - you should tell children that they may cross out any answers they wish to change
 - you should keep a rubber in readiness for children who wish to change answers they have drawn (such as lines or shapes) where changes may be clearer by rubbing out than by crossing out.

Children should also have access to number apparatus to complete the level 2 test. You should use your judgement to decide which type(s) of apparatus would best support children in your class. Children may have access to as many or as few of the following types of apparatus as you deem appropriate:

- structured apparatus consisting of tens and units for each group working at the same table. This must be available in sufficient quantity to allow children to select as much or as little as they wish
- a number line, showing numbers 0 to 30, for each child
- a 100 square numbered 1 to 100 for each child.

Please note:

No other support materials should be given to the children taking the level 2 test, for example clocks or clock faces, addition squares, multiplication squares, calculators or any representation of money (toy or real).

Wall displays such as tables charts should be covered or removed. However, it is not necessary to remove wall clocks, or cover number lines or number squares for the administration of the level 2 test.

Number apparatus must be structured into tens and units (interlocking cubes in sticks of tens and ones, Diennes tens and ones, etc) to discourage unhelpful counting in ones rather than use of tens where appropriate.

If interlocking cubes are used, each rod of ten cubes should be made up of one colour only. At least two different colours of rods should be provided. In this way, children can identify a group of ten easily as they calculate. However, you should not intervene if a child dismantles the structured tens when working.

Advance preparation

To help children with reading the questions, you may write words on the board and briefly check that children can recognise them, but you should not explain their meaning. For this test these words may include: *queue, sign, correct, sentence, squares, graph, colours, chocolate, altogether, purses, amount* and *quarter*. Remind the children that you may help them with reading during the test.

Administering the test fairly

In order to ensure that the test is administered fairly in different classrooms, it is important that all teachers behave in a similar way while the test is in progress.

THEREFORE YOU MUST:

- ensure that children can work undisturbed, individually and without access to materials that could give them an unfair advantage. Changes to the usual classroom layout may be necessary. It is important that you decide on seating arrangements before the start of the test, in order to ensure that children cannot see each other's work
- ensure that the children work on their own and do not discuss questions or copy answers. Some teachers have found one or more of the following strategies helpful to ensure that children cannot see each other's work: seating children at the ends of tables; seating children individually in a larger space; providing a blank sheet of paper to cover completed work on the open page; using large picture books, etc to create table screening between children
- observe the children throughout the test to ensure that they do not copy or distract each other
- ensure that wall displays, etc in the classroom do not give children an unfair advantage
- encourage the children to stay on task and to work at an appropriate pace, moving on to the next question promptly when it is clear that they cannot spend any more time productively on the question they are working on
- encourage children to check their work carefully when they have finished.

DO NOT:

- give help with the mathematics as this will invalidate the assessment
- re-present questions on addition or subtraction vertically when they are presented horizontally in the test booklet
- suggest to the children the mathematical operation to use
- give clues which help the children to interpret what any question requires them to do
- rephrase, or rewrite, any questions except where indicated in *Assistance for the written questions*
- prompt children to confirm or change answers by pointing, frowning, smiling, head shaking or nodding, offering rubbers, or asking leading questions.

Teachers of children learning English as an additional language or with special educational needs should refer to the further guidance on pages 6–10 of this guide.

Starting the test

Give each child a level 2 test booklet and make sure they have the resources they need. Ask the children to write their name in the space provided on the front of the booklet and introduce the test in your own words, making sure you cover the points outlined in ‘Introducing the characters in the booklet’ (below), ‘Introducing the level 2 oral questions’ (page 14) and ‘Introducing the level 2 written questions’ (page 18) at the appropriate times. To ensure that the testing is carried out in a standard way in all schools, it is important that your introduction does not exceed this information.

Introducing the characters in the booklet

Ask the children to open their booklet. Introduce the characters in the test booklet to the children. Read the names with the children to ensure that they will recognise them when they meet them in the booklet.

Explain that some other children may also be mentioned in the test.

Ask the children to close their booklets while you introduce the level 2 oral questions.

The two characters remove the need for children to read a variety of unfamiliar names in the test.

Introducing the level 2 oral questions

These questions will be read aloud by you. Guidance on what to say to the children is given below.

The first question is a practice question. It is not part of the assessment so you may help the children to understand the format, what they should do and where they should write their answer.

Children are allowed to use space on the test paper for working out their answers if necessary.

There is no time limit on each question, so the length of time taken will depend on the speed at which the children work. Proceed from one question to the next when you feel that all the children have had ample opportunity to work out the answer.

The text to be read aloud is shown in italics in the next section, 'Working through the level 2 oral questions'. The questions themselves are shown in bold italics. The language highlighted in this way is part of the assessment, and you should not rephrase it or give explanations of terms used.

Tell the children:

- *I will read aloud some questions for you to answer.*
- *I will read each question twice, leaving a short gap in between.*
- *If you want to hear the question a third time, put up your hand.*
- *You must listen very carefully when I read the questions.*
- *The first question is a practice question which we will all do together.*
- *I will explain how to write answers to each question.*
- *You will have plenty of time to work out the answers.*
- *You must work on your own and you must not call out the answers.*
- *If you make a mistake, cross it out / rub it out* neatly and write the answer clearly [*as appropriate].*
- *When you have finished answering a question, look up so that I know you have finished.*

Working through the level 2 oral questions

Ask the children to open their booklet.

Explain:

- *The boxes are for you to write your answers in.*
- *The letters below each box show you which box to use for each question.*
- *You can do any working out in the white spaces around the boxes, if you need to.*

Where necessary, you can show the children how to draw a tick, cross, etc.

Remember to repeat the question.
Repeat the ***bold text*** only.

Practice question

Teacher:

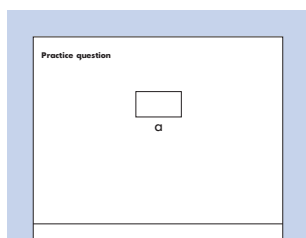
This is a practice question for us to do together.

Find box a.

[Help with locating the box where necessary.]

What is two add two?

Write your answer in box a.



Afterwards, ensure that children know the number they should have written, and discuss the methods the children used to work out the answer. Allow children to change their answers by crossing out or rubbing out, to make sure they know the way to correct errors.

Question 1

Teacher:

*Find box b.**What number is double ten?**Write the number in box b.***Question 2**

Teacher:

*Turn over the page.**Look at the shape names in box c.**They say:**pentagon, rectangle, triangle, square.**Two of these shapes have four corners.**Tick the names of these shapes.***Question 3**

Teacher:

*Look at the next page.**Find box d.**Sixty children visit the zoo.**[Clearly emphasise sixty to avoid confusion with sixteen.]**Half of the children visit the snakes.**How many children visit the snakes?**Write your answer in box d.*

Question 4

Teacher:

*Find box e.**What is thirty subtract nineteen?**Write your answer in box e.***Question 5**

Teacher:

*Turn over the page.**Look at the words in box f.**They are used for measuring.**The words say:**one metre, one centimetre, one kilogram, one litre.**One of these shows the weight of a bunch of bananas.**Which one?**Tick it.*

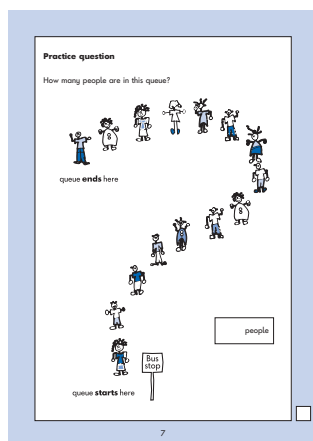
Introducing the level 2 written questions

Ask the children to close their booklets and to listen carefully while you introduce the written questions.

Tell the children:

- *I will do one practice question with all of you, and then you will go on by yourselves.*
- *Read each question, work out the answer and then write it in the space provided in the booklet.*
- *Always read what you are asked to do. Don't guess.*
- *You can have help with reading questions, but can't have help with working out answers. If you need help with reading, put up your hand but don't call out.*
- *[Optional] These are some of the harder words in the test. We will read them together now. [You may read any of the words on display as detailed on page 12 but do not explain these words in any way. You may read them again for any child as necessary during the test.]*
- *There is plenty of space in the booklet, which you can use for working out, writing or drawing your answers.*
- *If you are asked to show how you work something out, write or draw how you got your answer since you can get a mark for doing that.*
- *You may use any of the apparatus that I have provided [see page 11]. [If rods of ten interlocking cubes are provided, you may remind children that they are rods of ten.]*
- *If you make a mistake, you should change your answer by crossing / rubbing* it out [*as appropriate].*
- *Some questions are harder than others; if you cannot do one question, go on to the next one, which might be easier; go back to the harder ones later if you wish. You may not be able to complete all the questions, but do as many as you can.*
- *Take as long as you need to finish all the questions you can do.*
- *When you have done all you can, check your answers.*
- *Don't discuss the questions with anyone or copy answers.*

Working through the level 2 written questions



- Ask the children to turn to page 7 of their booklet and find the practice question.
- Help the children to work through the practice question. Allow them to answer the question before you discuss it.
- The practice question is not part of the test, and you can spend as much time as you like helping the children to understand the format, what they should do and where they should write their answers.
- Ask the children to start working on their own from question 6, unless you are reading the questions with the children.
- You can stop the testing whenever you judge it necessary, for example if you feel a child is becoming too unsettled or has done as much as possible.

Assisting children with the written questions

Reading the written questions

You may read the test to groups of children, using the 'look and listen' method, as outlined on page 5.

If you choose for children to work independently through the test, you should give help with reading words as necessary, and you may also read numbers included in sentences and scales on graphs. In general, you should not read numbers or symbols within calculations, for example ' $25 + 13 =$ '. You should not explain the wording of the questions in any way except to rephrase as permitted in *Assistance for the written questions*. In these circumstances, you may need to be aware of more fluent readers who might not ask for the help they need to read unfamiliar words, and give assistance as appropriate.

Rephrasing the written questions

There should be no written adaptations of the text. However, some words in the test may be rephrased, or explained, if these are not familiar to the children and where these are not mathematical terms and therefore not part of what is being tested. **It is very important not to exceed the permissible support.**

Other assistance

Apart from the guidance described above, and in *Assistance for the written questions*, no other assistance is allowed.

Marking the level 2 test

General guidance

When the children have completed the test, mark each answer right or wrong. The mark scheme helps you to identify the appropriate answers and tells you how many marks to allocate to each answer. Mark boxes have been provided in the margin of the test booklet, beside each question. For consistency, it is recommended that you enter 1 (mark awarded), 0 (question attempted but mark not awarded) or ‘-’ (question not attempted) in each mark box. These codes correspond with those used on the optional grid for test analysis. In addition, a box has been provided at the bottom right-hand side of each double-page spread to enter the total marks the child obtains for the set of questions that appear on the two pages. This is to help you to be accurate and efficient when totalling marks, but its use is optional.

The symbol ‘♦’ is used in the *Additional guidance* column in the mark scheme to indicate where you should pay particular attention to the mark scheme. Responses indicated in this way are those which were most likely to be marked inaccurately during trials of the test.

Questions with a *Using and applying mathematics* element are identified in the mark scheme by an encircled U with a number that indicates the significance of *Using and applying mathematics* in answering the question. The ‘U number’ for a two-mark question might be U1 or U2. A one-mark question might also have U1. For example, in a question with two marks, U2 would indicate great significance, while U1 would indicate some significance.

If a child has altered an answer or the answer is not clear, try to establish his or her final intention. You may occasionally need to talk with children individually to check this. Be sure to use open questions that do not suggest the required answer.

Any numeric answer is acceptable in word or number form unless otherwise stated.

Possible issues when marking

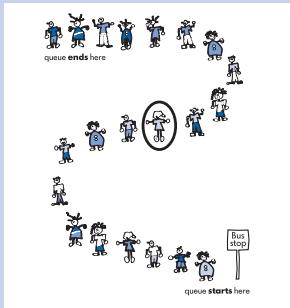
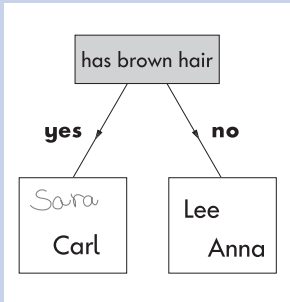
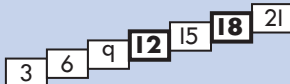
The child reverses a digit when recording	A reversed digit is acceptable if it is clearly recognisable as the digit intended; for example, a reversed 2 must clearly show the characteristics of a 2 rather than a 5.
The child writes a transposed number as the answer	Transposed numbers should not be awarded the mark; for example, an answer of '16' when the correct answer is '61' should not be marked as correct.
The child's response is numerically equivalent to the answer in the mark scheme	The mark scheme will generally specify which equivalent responses are allowed. If this is not the case, award the mark unless the mark scheme states otherwise.
The child's answer is correct but the wrong working is shown	Always award the mark(s) for a correct response unless the mark scheme states otherwise.
The correct response has been crossed (or rubbed) out and not replaced	Mark any legible crossed out work that has not been replaced according to the mark scheme. If the work has been replaced, then do not consider the crossed out work.
The child has worked out the answer correctly and then written an incorrect answer in the answer box	Give precedence to the answer given in the answer box over any other workings. However, there may be cases where the incorrect answer is due to a transcription error, in which case you may check the child's intention and decide whether to award the mark.
More than one answer is given	If all answers given are correct (or a range of answers is given, all of which are correct), award the mark unless the mark scheme states otherwise. If both correct and incorrect responses are given, do not award the mark unless the mark scheme states otherwise.
The child's response does not match closely any of the examples given in the mark scheme	Judge whether the response corresponds with the requirements in the <i>Answer</i> column of the mark scheme. Refer also to the <i>Additional guidance</i> column and to the <i>Examples of responses</i> (where appropriate).
There appears to be a misread of numbers affecting the working	In general, the mark should not be awarded. However, in two-mark questions that have a working mark, award one mark if the working is applied correctly using the misread numbers, provided that the misread numbers are comparable in difficulty to the original numbers. For example, if '243' is misread as '234', both numbers may be regarded as comparable in difficulty.
No answer is given in the expected place, but the correct answer is given elsewhere	Where a child has shown understanding of the question, award the mark. In particular, where a word or number response is expected, a child may meet the requirement by annotating a graph or labelling a diagram elsewhere in the question.
The child's answer correctly follows through from earlier incorrect work	'Follow through' marks may be awarded only when specifically stated in the mark scheme.

Mark scheme for the level 2 test

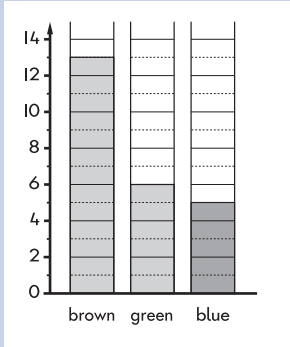
Oral

Question	Answer	Mark	Additional guidance
Practice	4	none	
1	20	1	
2	Ticks correct shape names as shown: pentagon rectangle ✓ triangle square ✓	1	Both shape names must be indicated for the award of the mark. Accept any other clear way of indicating the correct shape names, eg circling. ♦ Do not award the mark if more than two shape names are indicated.
3	30 (children)	1	
4	11	1	
5	Ticks correct amount as shown: 1 metre 1 centimetre 1 kilogram ✓ 1 litre	1	Accept any other clear way of indicating the correct measurement, eg underlining. ♦ Do not award the mark if more than one measurement is indicated.

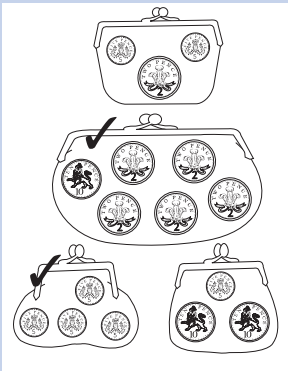
Written

Question	Answer	Mark	Additional guidance
Practice	15 (people)	none	
6	11th person circled as shown: 	1	Accept any other clear way of indicating the correct person, eg ticking. If the child indicates more than one person do not award the mark unless their final intention is clear.
7	19	1	
8	Missing symbols written as shown: 18 <input type="text" value="-"/> 7 <input type="text" value="="/> 11 or 18 <input type="text" value="="/> 7 <input type="text" value="+"/> 11	1	Both symbols must be correct for the award of the mark. ♦ Do not accept answers that extend the given calculation, eg $18 + 7 - 11 = 14$
9	Missing names written in correct regions as shown: 	1	All three names must be correctly positioned for the award of the mark. Accept any reasonable spellings. Accept also L, A or C written in the correct regions instead of Lee, Anna or Carl. ♦ Do not award the mark if any of the names Sara, Lee, Anna or Carl are written in more than one region. Award the mark if the child writes additional names in either region provided Lee, Anna and Carl are written in the correct regions.
10	Missing numbers written as shown: $3 + \boxed{5} = 8$ and $\boxed{4} + 5 = 9$	1	Both numbers must be correct for the award of the mark.
11	Missing numbers written as shown: 	1	Both numbers must be correct for the award of the mark.

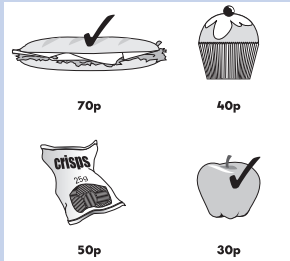
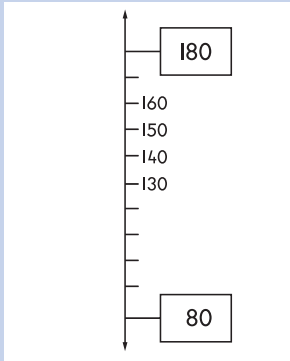
Written – continued

Question	Answer	Mark	Additional guidance
U1 12	Sentences ticked as shown: 19 is more than 36 28 is less than 52 ✓ 50 is more than 15 ✓ 45 is less than 23	1	<ul style="list-style-type: none"> Both sentences must be indicated for the award of the mark. Accept any other clear way of indicating the correct sentences, eg circling. Do not award the mark if more than two sentences are indicated.
13	Writes B2, C4 and D1 in any order.	1	All three must be correct for the award of the mark. <ul style="list-style-type: none"> Do not accept 2B, 4C or 1D.
14	12	1	
15	24 (children)	1	
16a	Shades five blocks in correct position on column representing children with blue eyes: 	1	Accept any other clear way of indicating the correct response on the graph, eg ticks in the correct blocks.
16b	7 (children)	1	

Written – continued

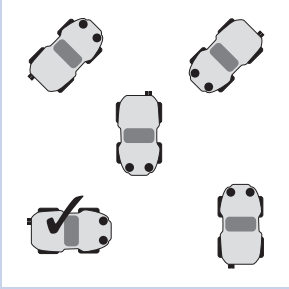
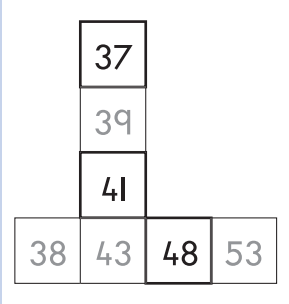
Question	Answer	Mark	Additional guidance
U1 17	<p>46 (eggs)</p> <p>This mark may be awarded for children who have the wrong answer but have recorded a complete method which, without arithmetical errors, would give the correct answer.</p> <div data-bbox="515 976 804 1178" style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>Use the acceptable and unacceptable responses given on pages 28 and 29 to help you make your decision.</p> </div>	<p>2</p> <p>OR</p> <p>1</p>	<p>Award both marks for the correct answer by entering 1 in each mark box.</p> <ul style="list-style-type: none"> ◆ A child with a correct answer can be awarded two marks even if they have failed to record a correct method or any method at all, since it can be assumed that they used a correct mental method to reach their answer. <p>If one mark is awarded, enter 1 then 0 in the mark boxes.</p> <p>One mark may be awarded to children who have failed to record the correct answer, provided they have demonstrated a complete and viable method for adding 10, 13, 11 and 12. (This might be numerals, signs, words, diagrams or any mixture of these.)</p> <ul style="list-style-type: none"> ◆ Children who record an ambiguous method, ie a pictorial method, the correct numbers without an operation or the correct operation, can be awarded one mark if they give an answer between 41 and 45 or 47 and 49 inclusive.
18	<p>Two purses ticked as shown:</p> 	<p>1</p>	<p>Accept any other clear way of indicating the correct response, eg joining the two purses.</p> <p>Do not award the mark if more than two purses are indicated.</p> <ul style="list-style-type: none"> ◆ Accept the correct amounts written by every purse, even if the correct two purses have not been ticked.

Written – continued

Question	Answer	Mark	Additional guidance						
<p>U1</p> <p>19</p>	<p>Items ticked as shown:</p> 	<p>1</p>	<p>Accept any other clear way of indicating the correct items, eg joining the two items.</p> <p>Do not award the mark if more than two items are indicated.</p> <p>Accept two ticks by the 50p item.</p>						
<p>20</p>	<p>Numbers written in correct boxes as shown:</p> <table border="1" data-bbox="513 835 804 954"> <tr> <td>rounds to 10</td> <td>rounds to 20</td> <td>rounds to 30</td> </tr> <tr> <td>12</td> <td>17</td> <td>33 28</td> </tr> </table>	rounds to 10	rounds to 20	rounds to 30	12	17	33 28	<p>1</p>	<p>All three numbers must be correctly positioned for the award of the mark.</p> <p>Do not award the mark if any of the numbers are written in more than one box.</p> <p>Award the mark if the child writes additional numbers, provided that 17, 12 and 28 are written in the correct boxes.</p>
rounds to 10	rounds to 20	rounds to 30							
12	17	33 28							
<p>21</p>	<p>92</p>	<p>1</p>							
<p>22</p>	<p>12 (kilograms)</p>	<p>1</p>							
<p>U1</p> <p>23</p>	<p>Draws a line between 7.7cm and 8.3cm long in the space between the 6cm and 10cm lines.</p>	<p>1</p>	<p>◆ This mark is awarded for the length of the line drawn. The empty box is intended to support children; they are not required to complete it correctly for the award of the mark.</p> <p>Do not award the mark if 8cm is written without a line within the given range.</p>						
<p>24</p>	<p>32</p>	<p>1</p>							
<p>25</p>	<p>10 (bags)</p>	<p>1</p>							
<p>26</p>	<p>Numbers written in the boxes as shown:</p> 	<p>1</p>	<p>Both numbers must be correct for the award of the mark.</p> <p>◆ 080 written in the bottom box may be treated as correct.</p>						

Level 2

Written – continued

Question	Answer	Mark	Additional guidance
27	<p>Bottom left car ticked as shown:</p> 	1	<p>Accept any other clear way of indicating the correct car, eg circling.</p> <p>Do not award the mark if more than one car is indicated.</p>
28	<p>Missing numbers written as shown:</p> 	1	<p>All three numbers must be correct for the award of the mark.</p> <p>◆ 37 must be written in the top box and 41 in the middle box. Do not award the mark if these numbers are swapped.</p>

Maximum 30 marks

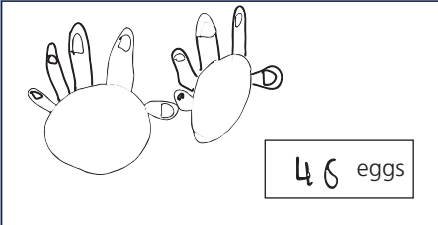
Examples of responses from question 17

1 or 2 marks

0 marks

Anne can be awarded two marks for a correct answer even though she has not recorded a method. Robert has recorded an answer that is close to 46; this suggests that he may have understood what was required. However, we cannot assume from his written description that he used a viable method. Therefore his method is not complete and cannot be awarded a mark.

Anne



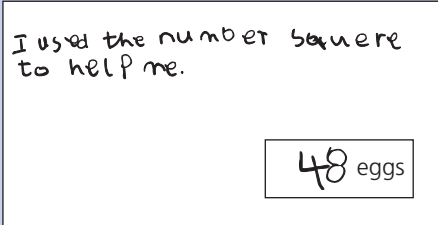
46 eggs

1

1

Robert

I used the number square to help me.



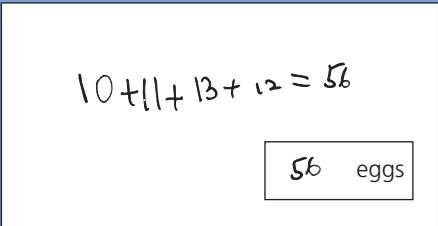
48 eggs

0

0

Asif has recorded a method that involves adding all four numbers in one calculation. However, even though he has made an error in totalling the numbers, he can be awarded one mark since his method is complete and, without an arithmetical error, would give the correct answer. Katie has also recorded all four numbers. However, her method is not complete since she has not indicated the operation for her calculation. Since Katie's method is ambiguous and has an answer outside the given ranges of 41 to 45 or 47 to 49 she cannot be awarded a mark.

Asif

$$10 + 11 + 13 + 12 = 56$$


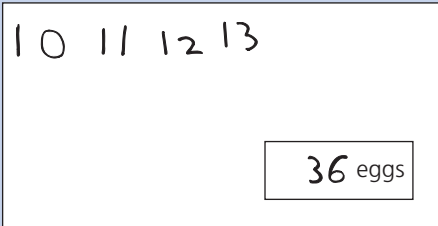
56 eggs

1

0

Katie

10 11 12 13



36 eggs

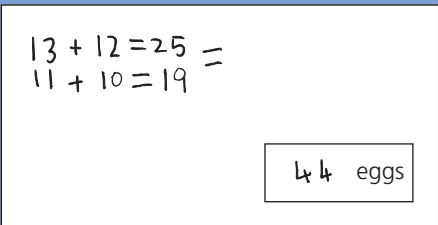
0

0

Simon has recognised the need to add all four numbers. He has chosen to do this through adding the numbers in pairs and then adding his answers. Although he has reached an incorrect answer, Simon has recorded a complete method that, without an arithmetical error, would give the correct answer. Simon can be awarded one mark. Dinah has also chosen to add pairs of numbers. However, she has not added the totals for both pairs of numbers and instead has written the total of only one of the two pairs as the final answer. Her method is not complete, so she cannot be awarded a mark.

Simon

$$13 + 12 = 25 =$$

$$11 + 10 = 19 =$$


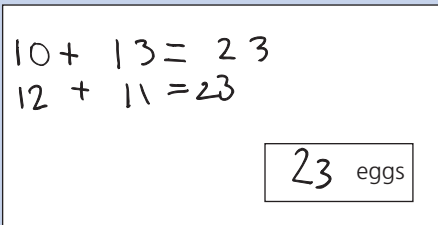
44 eggs

1

0

Dinah

$$10 + 13 = 23$$

$$12 + 11 = 23$$


23 eggs

0

0

Examples of responses from question 17 – continued

1 mark

0 marks

Mia has partitioned each number to add the tens and then the units. Despite the arithmetical error she made when adding the units, her method is complete and, without arithmetical error, would give the correct answer. Mia can be awarded one mark. Winston has attempted to partition each number and has successfully added the units. However, he has not taken account of all of the tens in his next mental step and as a result reached an incorrect answer of 16. Winston's method is not complete and therefore cannot be awarded a mark.

Mia

$$10 + 10 + 10 + 10 = 40$$

$$40 + 2 + 1 + 3 = 45$$

45 eggs

1
0

Winston

$$0 + 1 + 3 + 2 = 6$$

16 eggs

0
0

Ben has described a complete method for adding each number in turn which, without arithmetical errors, would give the correct answer. He can therefore be awarded one mark, even though his final total is incorrect. Amber has recorded all four relevant numbers. However, she has not described the operation she used to complete her calculation. Neither can we assume that she intended to add all four numbers because her answer is not within the given ranges, 41 to 45 or 47 to 49. Therefore she cannot be awarded the mark.

Ben

I added 12 to
13 then added.
10 then I added
11 and I think it =

48 eggs

1
0

Amber

I did it in my head
10 13 11 12

32 eggs

0
0

Children who record a pictorial method must show they intended to complete it correctly. Kajal has attempted to record all the relevant numbers using tallies. Even though she has recorded an incorrect number of tallies for the number 12, she has completed the method by counting them correctly and reaching her answer of 47. While this is an inefficient method, it shows clear intention to add all four numbers and her answer is within the given ranges, 41 to 45 or 47 to 49. Therefore she can be awarded one mark. Tyler has recorded each number correctly using dots. However, it is not clear that he knew to count all the dots since his answer is outside the given range. Therefore his method is not complete and cannot be awarded a mark.

Kajal

	13	<div style="border: 1px solid black; display: inline-block; padding: 2px 10px;">47 eggs</div>
	12	
	11	
	10	

1
0

Tyler

24 eggs

0
0

Finding the level

Add up each child's total score for the test out of the maximum of 30 marks (not including the practice questions) and write this total in the box marked 'Score' on the front of the child's test booklet. Then refer to the table below to find the level and grade, and enter this on the front of the booklet in the box marked 'Level and grade'. This information will then be available to transfer onto any recording or reporting document.

Evidence shows that it is easy to make careless slips in adding up total scores, and these slips could disadvantage the child. Particular attention should be paid to two-mark questions and those instances where two marks should be awarded for recording a correct answer only. **Thorough checking and rechecking are, therefore, strongly recommended.**

If a child achieves level 2A in this test you may enter him or her for the level 3 test, although you do not have to. You should use your judgement to decide whether it is appropriate to enter children who have only just been awarded level 2A for the level 3 test.

Number of marks	0–4	5–6	7–12	13–18	19–30
Level	No level achieved	Level 1 achieved	Level 2C achieved	Level 2B achieved	Level 2A achieved

Administering the level 3 test

Resources

This test is designed for children working at level 3.

For both the oral and written questions, each child will need:

- a copy of the level 3 test booklet
- a pen or pencil
- a ruler with which they are familiar. It is assumed that children working at level 3 will have experience of rulers graduated in half centimetres
- a mirror
- a rubber (optional). You may obtain more useful diagnostic information if you encourage your children to leave their working out on the page and to cross out their mistakes rather than rubbing them out. If rubbers are not provided:
 - you should tell children that they may cross out any answers they wish to change
 - you should keep a rubber in readiness for children who wish to change answers they have drawn (such as lines or shapes) where changes may be clearer by rubbing out than by crossing out.

Please note:

Number apparatus, number lines or 100 squares are **not** allowed for use with this test.

No other support materials should be given to the children taking the level 3 test, for example number lines, 100 squares, structured apparatus consisting of tens and units, clocks or clock faces, addition squares, multiplication squares, calculators or any representation of money (toy or real).

Wall displays such as tables charts, number lines or number squares should be covered or removed. However, it is not necessary to remove wall clocks.

Advance preparation

To help children with reading the questions, you may write words on the board and briefly check that children can recognise them, but you should not explain their meaning. For this test these words may include: *correct, diagram, sequence, reflection, twice, Saturday, counters, different, answer, route, purse, amount, millilitres* and *fraction*. Remind the children that you may help them with reading during the test.

Administering the test fairly

In order to ensure that the test is administered fairly in different classrooms, it is important that all teachers behave in a similar way while the test is in progress.

THEREFORE YOU MUST:

- ensure that children can work undisturbed, individually and without access to materials that could give them an unfair advantage. Changes to the usual classroom layout may be necessary. It is important that you decide on seating arrangements before the start of the test, in order to ensure that children cannot see each other's work
- ensure that the children work on their own and do not discuss questions or copy answers. Some teachers have found one or more of the following strategies helpful to ensure that children cannot see each other's work: seating children at the ends of tables; seating children individually in a larger space; providing a blank sheet of paper to cover completed work on the open page; using large picture books, etc to create table screening between children
- observe the children throughout the test to ensure that they do not copy or distract each other
- ensure that wall displays, etc in the classroom do not give children an unfair advantage
- encourage the children to stay on task and to work at an appropriate pace, moving on to the next question promptly when it is clear that they cannot spend any more time productively on the question they are working on
- encourage children to check their work carefully when they have finished.

DO NOT:

- give help with the mathematics as this will invalidate the assessment
- re-present questions on addition or subtraction vertically when they are presented horizontally in the test booklet
- suggest to the children the mathematical operation to use
- give clues which help the children to interpret what any question requires them to do
- rephrase, or rewrite, any questions except where indicated in *Assistance for the written questions*
- prompt children to confirm or change answers by pointing, frowning, smiling, head shaking or nodding, offering rubbers, or asking leading questions.

Teachers of children learning English as an additional language or with special educational needs should refer to the further guidance on pages 6–10 of this guide.

Starting the test

Give each child a level 3 test booklet, and make sure they have the resources they need. Ask the children to write their name in the space provided on the front of the booklet and introduce the test in your own words, making sure you cover the points outlined in ‘Introducing the characters in the booklet’ and ‘Introducing the level 3 oral questions’ (below) then in ‘Introducing the level 3 written questions’ (page 37) at the appropriate times. To ensure that the testing is carried out in a standard way in all schools, it is important that your introduction does not exceed this information.

Introducing the characters in the booklet

The two characters remove the need for children to read a variety of unfamiliar names in the test.

Ask the children to open their booklet. Introduce the characters in the test booklet to the children. Read the names with the children to ensure that they will recognise them when they meet them in the booklet.

Explain that some other children may also be mentioned in the test.

Ask the children to close their booklets while you introduce the level 3 oral questions.

Introducing the level 3 oral questions

These questions will be read aloud by you. Guidance on what to say to the children is given overleaf.

The first question is a practice question. It is not part of the assessment so you may help the children to understand the format, what they should do and where they should write their answer.

Children are allowed to use space on the test paper for working out their answers if necessary.

There is no time limit on each question, so the length of time taken will depend on the speed at which the children work. Proceed from one question to the next when you feel that all the children have had ample opportunity to work out the answer.

The text to be read aloud is shown in italics in the next section, ‘Working through the level 3 oral questions’. The questions themselves are shown in bold italics. The language highlighted in this way is part of the assessment, and you should not rephrase it or give explanations of terms used.

Tell the children:

- *I will read aloud some questions for you to answer.*
- *I will read each question twice, leaving a short gap in between.*
- *If you want to hear the question a third time, put up your hand.*
- *You must listen very carefully when I read the questions.*
- *The first question is a practice question which we will all do together.*
- *I will explain how to write answers to each question.*
- *You will have plenty of time to work out the answers.*
- *You must work on your own and you must not call out the answers.*
- *If you make a mistake, cross it out / rub it out* neatly and write the answer clearly [*as appropriate].*
- *When you have finished answering a question, look up so that I know you have finished.*

Working through the level 3 oral questions

Ask the children to open their booklet.

Explain:

- *The boxes are for you to write your answers in.*
- *The letters below each box show you which box to use for each question.*
- *You can do any working out in the white spaces around the boxes, if you need to.*

Where necessary, you can show the children how to draw a tick, cross, etc.

Remember to repeat the question.

Practice question

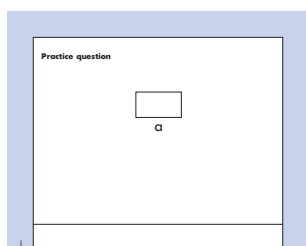
Teacher:

This is a practice question for us to do together.

Find box a.

[Help with locating the box where necessary.]

What is four multiplied by ten?



Write your answer in box a.

Afterwards, ensure that children know the number they should have written, and discuss the methods the children used to work out the answer. Allow children to change their answers by crossing out or rubbing out, to make sure they know the way to correct errors.

Question 1

Teacher:

Find box b.

What is six multiplied by five?

[Clearly emphasise five to avoid confusion with nine.]

Write your answer in box b.

Question 2

Teacher:

Turn over the page.

Look at the shape names in box c.

They say:

cylinder, cube, pyramid, cuboid.

Two of these shapes always have six faces.

Tick the names of the two shapes.

Question 3

Teacher:

*Find box d.**Jack thinks of a number.**It is a multiple of ten.**It is more than one hundred and fifty and less than two hundred.**[Clearly emphasise one hundred and fifty to avoid confusion with one hundred and fifteen.]**What could the number be?**Write the number in box d.***Question 4**

Teacher:

*Look at the next page.**Find box e.**A train should arrive at 6:45.**[Clearly emphasise forty-five to avoid confusion with forty-nine.]**It is fifteen minutes late.**[Clearly emphasise fifteen to avoid confusion with fifty.]**At what time does it arrive?**Write your answer in box e.***Question 5**

Teacher:

*Find box f.**Now look at the picture.**A toy costs eight pounds fifty.**Kemi pays with a ten pound note.**How much change does she get?**Write your answer in box f.*

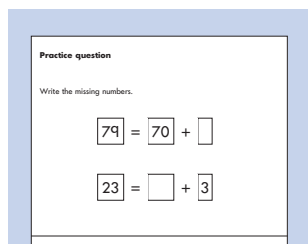
Introducing the level 3 written questions

Ask the children to close their booklets and to listen carefully while you introduce the written questions.

Tell the children:

- *I will do one practice question with all of you, and then you will go on by yourselves.*
- *Read each question, work out the answer and then write it in the space provided in the booklet.*
- *Always read what you are asked to do. Don't guess.*
- *You can have help with reading questions, but you can't have help with working out answers. If you need help with reading, put up your hand but don't call out.*
- *[Optional] These are some of the harder words in the test. We will read them together now. [You may read any of the words on display as detailed on page 31 but do not explain these words in any way. You may read them again for any child as necessary during the test.]*
- *There is plenty of space in the booklet, which you can use for working out, writing or drawing your answers.*
- *If you are asked to show how you work something out, write or draw how you got your answer since you can get a mark for doing that.*
- *You may use the ruler and mirror that I have provided [see page 31].*
- *If you make a mistake, you should change your answer by crossing / rubbing* it out [*as appropriate].*
- *Some questions are harder than others; if you cannot do one question, go on to the next one, which might be easier; go back to the harder ones later if you wish. You may not be able to complete all the questions, but do as many as you can.*
- *Take as long as you need to finish all the questions you can do.*
- *When you have done all you can, check your answers.*
- *Don't discuss the questions with anyone or copy answers.*

Working through the level 3 written questions



- Ask the children to turn to page 6 of their booklet and find the practice question.
- Help the children to work through the practice question. Allow them to answer the question before you discuss it.
- The practice question is not part of the test, and you can spend as much time as you like helping the children to understand the format, what they should do and where they should write their answers.
- Ask the children to start working on their own from question 6, unless you are reading the questions with the children.
- You can stop the testing whenever you judge it necessary, for example if you feel a child is becoming too unsettled or has done as much as possible.

Assisting children with the written questions

Reading the written questions

You may read the test to groups of children, using the ‘look and listen’ method, as outlined on page 5.

If you choose for children to work independently through the test, you should give help with reading words as necessary, and you may also read numbers included in sentences and scales on graphs. In general, you should not read numbers or symbols within calculations, for example ‘25 + 13 =’. You should not explain the wording of the questions in any way except to rephrase as permitted in *Assistance for the written questions*. In these circumstances, you may need to be aware of more fluent readers who might not ask for the help they need to read unfamiliar words.

Rephrasing the written questions

There should be no written adaptations of the text. However, some words in the test may be rephrased, or explained, if these are not familiar to the children and are not mathematical terms and therefore not part of what is being tested. **It is very important not to exceed the permissible support.**

Other assistance

Apart from the guidance described above, and in *Assistance for the written questions*, no other assistance is allowed.

Marking the level 3 test

General guidance

When the children have completed the test, mark each answer right or wrong. The mark scheme helps you to identify the appropriate answers and tells you how many marks to allocate to each answer. Mark boxes have been provided in the margin of the test booklet, beside each question. For consistency, it is recommended that you enter 1 (mark awarded), 0 (question attempted but mark not awarded) or ‘-’ (question not attempted) in each mark box. These codes correspond with those used on the optional grid for test analysis. In addition, a box has been provided at the bottom right-hand side of each double-page spread to enter the total marks the child obtains for the set of questions that appear on the two pages. This is to help you to be accurate and efficient when totalling marks, but its use is optional.

The symbol ‘♦’ is used in the *Additional guidance* column in the mark scheme to indicate where you should pay particular attention to the mark scheme. Responses indicated in this way are those which were most likely to be marked inaccurately during trials of the test.

Questions with a *Using and applying mathematics* element are identified in the mark scheme by an encircled U with a number that indicates the significance of *Using and applying mathematics* in answering the question. The ‘U number’ for a two-mark question might be U1 or U2. A one-mark question might also have U1. For example, in a question with two marks, U2 would indicate great significance, while U1 would indicate some significance.

If a child has altered an answer or the answer is not clear, try to establish his or her final intention. You may occasionally need to talk with children individually to check this. Be sure to use open questions that do not suggest the required answer.

Any numeric answer is acceptable in word or number form unless otherwise stated.

Possible issues when marking

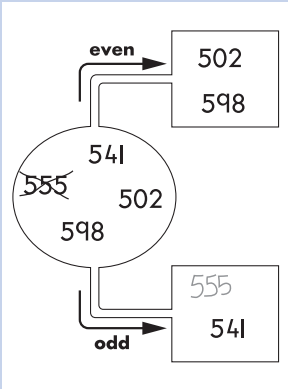
The child reverses a digit when recording	A reversed digit is acceptable if it is clearly recognisable as the digit intended; for example, a reversed 2 must clearly show the characteristics of a 2 rather than a 5.
The child writes a transposed number as the answer	Transposed numbers should not be awarded the mark; for example, an answer of '16' when the correct answer is '61' should not be marked as correct.
The child's response is numerically equivalent to the answer in the mark scheme	The mark scheme will generally specify which equivalent responses are allowed. If this is not the case, award the mark unless the mark scheme states otherwise.
The child's answer is correct but the wrong working is shown	Always award the mark(s) for a correct response unless the mark scheme states otherwise.
The correct response has been crossed (or rubbed) out and not replaced	Mark any legible crossed out work that has not been replaced according to the mark scheme. If the work has been replaced, then do not consider the crossed out work.
The child has worked out the answer correctly and then written an incorrect answer in the answer box	Give precedence to the answer given in the answer box over any other workings. However, there may be cases where the incorrect answer is due to a transcription error, in which case you may check the child's intention and decide whether to award the mark.
More than one answer is given	If all answers given are correct (or a range of answers is given, all of which are correct), award the mark unless the mark scheme states otherwise. If both correct and incorrect responses are given, do not award the mark unless the mark scheme states otherwise.
The child's response does not match closely any of the examples given in the mark scheme	Judge whether the response corresponds with the requirements in the <i>Answer</i> column of the mark scheme. Refer also to the <i>Additional guidance</i> column and to the <i>Examples of responses</i> (where appropriate).
There appears to be a misread of numbers affecting the working	In general, the mark should not be awarded. However, in two-mark questions that have a working mark, award one mark if the working is applied correctly using the misread numbers, provided that the misread numbers are comparable in difficulty to the original numbers. For example, if '243' is misread as '234', both numbers may be regarded as comparable in difficulty.
No answer is given in the expected place, but the correct answer is given elsewhere	Where a child has shown understanding of the question, award the mark. In particular, where a word or number response is expected, a child may meet the requirement by annotating a graph or labelling a diagram elsewhere in the question.
The child's answer correctly follows through from earlier incorrect work	'Follow through' marks may be awarded only when specifically stated in the mark scheme.

Mark scheme for the level 3 test

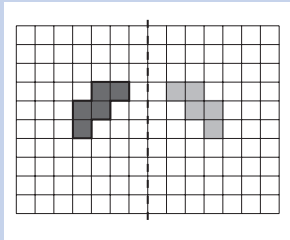
Oral

Question	Answer	Mark	Additional guidance
Practice	40	none	
1	30	1	
2	Ticks correct shape names as shown: cylinder cube ✓ pyramid cuboid ✓	1	Both shape names must be indicated for the award of the mark. Accept any other clear way of indicating the correct shape names, eg circling. Do not award the mark if more than two shape names are indicated.
3	160 or 170 or 180 or 190	1	♦ Accept more than one number given, provided all numbers are correct.
4	7:00	1	Accept 7:00am, 7:00pm, 07:00 or 19:00. Accept a different way of indicating the correct time, eg a clock drawn that shows the correct time or 'seven o'clock'.
5	£1.50	1	Accept £1.50p, £1-50, £1:50 or £1 50 (with a clear space between 1 and 5). Do not accept £150p or £150.

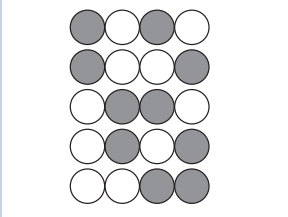
Written

Question	Answer	Mark	Additional guidance						
Practice	Missing numbers written as shown: $79 = 70 + 9$ and $23 = 20 + 3$	none							
6	Missing numbers written as shown: $361 = 300 + 60 + 1$ and $945 = 900 + 40 + 5$	1	Both numbers must be correct for the award of the mark.						
7	Numbers written in correct regions as shown: 	1	All three numbers must be correctly positioned for the award of the mark. Accept any other clear way of indicating the correct response, eg joining the numbers to the correct region. Do not award the mark if any of 541, 502 or 598 are written in more than one region. Award the mark if additional numbers are written in either region, provided 541, 502 and 598 are written in the correct regions.						
8	Table completed as shown: <table border="1" data-bbox="515 1480 804 1675"> <tbody> <tr> <td>1×5</td> <td>5</td> </tr> <tr> <td>3×5</td> <td>15</td> </tr> <tr> <td>7×5</td> <td>35</td> </tr> </tbody> </table>	1×5	5	3×5	15	7×5	35	1	Both responses must be correct for the award of the mark. Accept 5×7 in the bottom box.
1×5	5								
3×5	15								
7×5	35								
9	500	1							

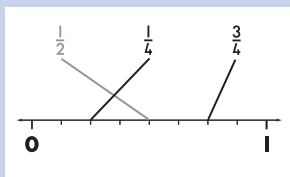
Written – continued

Question	Answer	Mark	Additional guidance
10	Missing numbers written as shown: $60 + \boxed{40} = 100 = 20 + \boxed{80}$	1	Both numbers must be correct for the award of the mark.
11	Reflection completed as shown: 	1	<ul style="list-style-type: none"> ◆ Accept slight inaccuracies in drawing, provided the intention is clear. ◆ The reflected shape must be correctly positioned for the award of the mark. <p>The shape does not need to be shaded for the award of the mark.</p>
12a	Jim and Lucy	1	<p>Both names must be correct for the award of the mark.</p> <p>Accept any reasonable spellings. Accept also J or L written instead of Jim or Lucy.</p> <p>Accept 52 or 72 for Jim and 32 or 62 for Lucy.</p> <p>Accept names written in either order.</p>
12b	Sara	1	<p>Accept any reasonable spellings. Accept also S written instead of Sara.</p> <p>Accept 56 or 28 for Sara.</p>
13	Writes any two numbers in the empty boxes that multiply to give 30.	1	<ul style="list-style-type: none"> ◆ These are the possible correct pairs of whole numbers and can be given in either order: <ul style="list-style-type: none"> 1, 30 2, 15 3, 10 5, 6
14	11 (Saturdays)	1	Do not accept 10.
15	6	1	

Written – continued

Question	Answer	Mark	Additional guidance
(U1) 16	<p>Counters arranged in five different ways in any order as shown:</p>  <p>Award one mark for any four out of the five arrangements shown.</p>	<p>2</p> <p>OR</p> <p>1</p>	<p>Award both marks for the correct answer by entering 1 in each mark box.</p> <p>Accept any other clear way of indicating the correct response, eg circles crossed.</p> <p>◆ If one mark is awarded, enter 1 then 0 in the mark boxes.</p>
17	75 (cards)	<p>1</p>	
(U1) 18	297	<p>1</p>	
(U1) 19	<p>This mark may be awarded for children who have a method that communicates clearly how $50 \times 4 \times 2$ could have been calculated.</p> <div data-bbox="515 1218 804 1413" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Use the acceptable and unacceptable responses given on pages 46 and 47 to help you make your decision.</p> </div>	<p>1</p>	<p>Award the mark if the method a child communicates clearly indicates that they have attempted to multiply the three numbers, eg by finding four lots of 50 then doubling the answer, using a complete method. (This method might be numerals, signs, words, diagrams or any mixture of these.)</p> <p>◆ Do not accept only $50 \times 4 \times 2$ or rearrangements of this multiplication, eg $2 \times 4 \times 50$, since this merely restates the question.</p>
20	<p>Completes the route as shown:</p> <p>S2 E1 S1</p>	<p>1</p>	<p>All three parts of the route must be correct for the award of the mark.</p> <p>◆ Accept unambiguous alternative notation for the correct route, eg South 2, East 1, South 1 or 2S, 1E and 1S.</p>
(U1) 21	<p>Amounts ticked as shown:</p> <p>23p 20p ✓ 25p ✓ 22p ✓ 26p</p>	<p>1</p>	<p>All three amounts must be correct for the award of the mark.</p> <p>Accept any other clear way of indicating the correct amounts, eg circling.</p>

Written – continued

Question	Answer	Mark	Additional guidance
22	240	1	
23	300 (millilitres)	1	
U1 24	50p or £0.50 This mark may be awarded for children who have the wrong answer but have recorded a complete method which, without arithmetical errors, would give the correct answer. Use the acceptable and unacceptable responses given on pages 48 and 49 to help you make your decision.	2 OR 1	Award both marks for the correct answer by entering 1 in each mark box. For two marks , accept 50, 0.50, £0.50p, £0-50, £0:50, £0 50 (with a clear space between 0 and 5) or fifty pence written in words. ♦ A child with a correct answer can be awarded two marks even if they have failed to record a correct method or any method at all, since it can be assumed that they used a correct mental method to reach their answer. If one mark is awarded, enter 1 then 0 in the mark boxes. For one mark , accept a correct value with incorrect use of units as evidence of a complete method, eg £50, 0.50p or £50p. Do not accept £1.50 for one mark. One mark may be awarded to children who have failed to record the correct answer, provided they have demonstrated a complete method for finding six lots of 25p and then finding the difference between this value and £2. (This might be numerals, signs, words, diagrams or any mixture of these.)
25	Fractions joined to the correct positions as shown: 	1	Both fractions must be correctly positioned for the award of the mark. ♦ Accept a line that is not joined exactly to the correct notch, provided it is closer to the correct notch than any other. Accept any other clear way of indicating the correct positions, eg fractions written in the correct place on the number line.
26	115	1	
27	275	1	

Maximum 30 marks

Examples of responses from question 19

1 mark

0 marks

Molly has split the calculation into two stages: she has multiplied 50 by four and then multiplied her answer by two. Although she has joined the second multiplication onto the end of the first, this is a complete and viable method that can be awarded the mark. Adam has recorded a multiplication that merely reorders the given numbers. Adam cannot be awarded the mark because his method does not demonstrate sufficient understanding of how to carry out the calculation.

Molly

$$50 \times 4 = 200 \times 2 = 400$$

400

1

Adam

$$4 \times 2 \times 50$$

400

0

Laila has split the multiplication into two stages: she has multiplied four by two and then multiplied her answer by 50. This is a complete method that can be awarded the mark. Victoria has recorded two multiplications that each show a possible first stage of the multiplication. However, she has not completed either of them and cannot be awarded the mark.

Laila

$$4 \times 2 = 8 \quad 50 \times 8 = 400$$

400

1

Victoria

$$50 \times 4 = 200$$

$$4 \times 2 = 8$$

400

0

William has described adding four lots of 50 to represent 50×4 . He has then described adding two lots of the answer to his first calculation to represent the final stage of multiplying by two. The method that he describes is both complete and viable so it can be awarded the mark. The first stage of Emma's description is similar to William's. However, her description of the second stage is ambiguous. Therefore we cannot treat Emma's method as complete or viable and cannot award her the mark.

William

Well Jack did it by adding 4 50.s and added 200 once to the other 200 to make 400

400

1

Emma

50 count four times then do the same with two

400

0

Examples of responses from question 19 – continued

1 mark

0 marks

Jonah recorded four lots of 50 to represent 50×4 and then chose to multiply this by two to complete the given calculation. This is a complete method that can be awarded the mark. Karen recorded two lots of 50 to represent 50×2 . However, she failed to show a way of multiplying her answer by four and instead added 300 to make 400. While Karen has shown a way to make 400, her method does not show how to work out the given multiplication and therefore cannot be awarded the mark.

Jonah

$$\begin{array}{cccc} 50 & 50 & 50 & 50 \\ & & & \times 2 = 400 \end{array}$$

400

1

Karen

$$\begin{array}{l} 50 + 50 = 100 \\ 100 + 300 = 400 \end{array}$$

400

0

Lucy has laid out her additions of 50 in the form of a four by two array and has used her knowledge that 50 multiplied by two equals 100. She has then gone on to add four lots of 100 to reach 400. This is an efficient method that can be awarded the mark. Dylan has also added four lots of 100. However, he does not show how his hundreds relate to $50 \times 4 \times 2$. Therefore we cannot treat his method as complete or viable and cannot award him the mark.

Lucy

$$\begin{array}{cccc} 50 & 50 & 50 & 50 \\ + & + & + & + \\ 50 & 50 & 50 & 50 \\ 100 + 100 + 100 + 100 = 400 \end{array}$$

400

1

Dylan

$$100 + 100 + 100 + 100$$

400

0

Dhruv has repeatedly added 50. He knows that four times two equals eight and has therefore added 50 eight times. His method is complete, so it can be awarded the mark. Neil has recorded a pattern of multiplications that shows multiplication by 50. However, an error in his multiplications resulted in him stopping at 50×7 . Therefore his method is incomplete and cannot be awarded the mark.

Dhruv

$$\begin{array}{l} 50 \\ 100 \\ 150 \\ 200 \\ 250 \\ 300 \end{array} \quad \begin{array}{l} 350 \\ 400 \end{array}$$

400

1

Neil

$$\begin{array}{l} 50 \times 1 = 100 \\ 50 \times 2 = 105 \\ 50 \times 3 = 200 \\ 50 \times 4 = 250 \end{array} \quad \begin{array}{l} 50 \times 5 = 300 \\ 50 \times 6 = 350 \\ 50 \times 7 = 400 \end{array}$$

400

0

Examples of responses from question 24

1 or 2 marks

1 or 0 marks

Abbie can be awarded two marks for a correct answer even though she has not recorded a method. Taylor has recorded the same number as Abbie but has used incorrect units of money. Taylor has not recorded a method. However, we can assume that he used an appropriate mental method since he has reached the correct numerical answer even though he has not used money notation correctly. Taylor can be awarded one mark despite the use of incorrect units.

Abbie

50p ~~£1.00~~?

1

1

Taylor

£50

1

0

Maisie has attempted to find six lots of 25p, but has recorded an incorrect answer. She has then correctly counted on from her answer up to £2. Despite the arithmetical error in the first stage of her calculation she has recorded a complete method that can be awarded one mark. Aisha has correctly found the difference between £1.75 and £2. However, we do not know how she reached the value £1.75. Therefore her method is not complete and cannot be awarded a mark.

Maisie

$25p \times 6 = \text{£}1.40$
 $\text{£}1.4 \text{ up to } \text{£}2.00 = 60p$

60p

1

0

Aisha

$\text{£}1.75 + 25p = \text{£}2.00$
 so it is 25p

25p change

0

0

Mohammed has attempted to add six lots of 25p. However, he has made an arithmetical error in his addition. He has then proceeded to correctly find the difference between his answer and £2. Despite the arithmetical error his method is complete and, without arithmetical error, would give the correct answer. He can therefore be awarded one mark. George has also attempted to add six lots of 25p but has failed to recognise the need to complete the second stage of the problem. His method is not complete and cannot be awarded a mark.

Mohammed

$25 + 25 + 25 + 25 + 25 + 25$
 50 95 130

70p

1

0

George

$25 + 25 = 50$
 $50 + 25 = 75$
 $75 + 25 = 100$
 $100 + 25 = 125$
 $125 + 25 =$

0

0

Examples of responses from question 24 – continued

1 mark

0 marks

Kieran started with £2 and counted back 25p six times. However, he has made an arithmetical error in one of the steps in his calculation to reach an incorrect final answer. Kieran's method is complete and, without this error, would have led to the correct answer. He can be awarded one mark. Erin has worked out the answer to five lots of 25p instead of six lots of 25p. Even though she has found the difference between her answer and £2, she cannot be awarded a mark since the first stage of her method is incorrect.

Kieran

200p⁰
 175p¹
 150p²
 100p³
 75p⁴
 50p⁵
 25p⁶

25p

1

0

Erin

$4 \times 25p = \pounds 1.00$
 $\pounds 1.00 + 25p = \pounds 1.25$
 $\pounds 1.25 + 75p = \pounds 2.00$

75p

0

0

Daria has recorded a pictorial method to show six lots of two 10p coins and a 5p coin. Although she incorrectly totalled these to reach £1.55 she correctly found the difference between £1.55 and £2. Apart from the arithmetical error, her method is complete and can be awarded one mark. Elijah has attempted to partition. However, he has only taken account of three lots of 20p rather than six lots. Even though the additions are completed correctly and he found the difference between his total and £2, his method is not complete. Elijah cannot be awarded the mark.

Daria

10 10 5 10 10 5 10 10 5 10 10 5

10 10 5 10 10 5 10 10 5

⇒ £1.55

45

1

0

Elijah

$20p + 20p + 20p = 60p$
 $60p + 10p + 10p + 10p = 90p$
 $90p + \pounds 1.10 = \pounds 2.00$

0

0

Liam has described a method that involves adding six lots of 25p and finding the difference between his answer and £2. However, he has made an arithmetical error in the first stage of his calculation. Apart from this error his method is complete and can be awarded one mark. Nicole has partitioned 25p into 20 and 5. She has described counting back six lots of 20p and recorded 80p in the answer box. She then realised that she needed to count back in fives but was unclear about the number of fives that she needed to count back. Her method is incorrect so she cannot be awarded a mark.

Liam

I added 6 25p that make £1.25p
 I added on to £2.00 and was 75p

75p

1

0

Nicole

I took away 6 twenty's
 and then counted back fives.

40p
~~30p~~

0

0

Finding the level

Add up each child's total score for the test out of the maximum of 30 marks (not including the practice questions) and write this total in the box marked 'Score' on the front of the child's test booklet. Then refer to the table below to find whether the level was achieved, and enter this on the front of the booklet in the box marked 'Level'. This information will then be available to transfer onto any recording or reporting document.

Evidence shows that it is easy to make careless slips in adding up total scores, and these slips could disadvantage the child. Particular attention should be paid to two-mark questions and those instances where two marks should be awarded for recording a correct answer only. **Thorough checking and rechecking are, therefore, strongly recommended.**

If a child does not achieve level 3 in this test, and has not already been assessed at level 2, you may decide to enter him or her for the level 2 test, although you do not have to.

If a child scores very highly on this test (at or near 100 per cent), you should consider whether further assessment, using one of the following options, is appropriate:

- the optional tasks to support teacher assessment for more able children. These tasks are available on QCA's website at www.qca.org.uk/ages3-14/tests_tasks with exemplar material and commentaries from teachers to support the level awarded for the task
- taking an optional end-of-year test early, eg year 3 or year 4
- early entry for the end of key stage 2 tests if the child has completed the programmes of study for key stage 2 and is about to move into the programmes of study for key stage 3.

Number of marks	0–11	12–30
Level	Level 3 not achieved	Level 3 achieved

Age standardised scores

This section provides age standardised scores from the 2007 key stage 1 mathematics tests. The scores are for **optional** use, and you need only refer to this section if you wish. The purpose of the information set out here is to allow you to convert the child's actual score in the tests – the 'raw score' – to an age standardised score. Age standardised scores take into account the child's age in years and months, so you have an indication of how each child is performing relative to other children of the same age. However, age standardised scores will not affect the child's level of achievement in the national curriculum as awarded by the outcome of the tests.

The tables were calculated from the results of standardisation trials of each test with over 2,000 children in a nationally representative sample of schools. The information in the tables is specific to each test and cannot be used for any others.

Calculating age standardised scores

You will need each child's test score and age at the time of testing, in years and *completed* months. For example, a child born on 30 March 2000 and tested on 15 May 2007 would be 7 years and 1 month old.

Using the tables on pages 53 and 54 you can convert the raw test score into an age standardised score by:

- locating the child's age in years and completed months at the time the test was taken, along the top of the table
- locating the child's raw test score down the left side of the table
- reading off the standardised score from where the row and column meet.

The average standardised score is 100. A higher score is above average and a lower score is below average. About two-thirds of the children will have standardised scores of between 85 and 115. Almost all children fall within the range of 70 to 130, so scores outside this range can be regarded as exceptional.

Making use of age standardised scores

If you choose to find the age standardised scores, you may use this additional information about the children's performance in any way you wish.

For example:

- You may decide to inform parents about how a child's performance in the test related to his or her age at the time the test was taken, eg *a standardised score of 112 shows that the child's performance was above average for his or her age.*

- The progress made by a class or a school can be monitored from one year to the next. Age standardised scores can be calculated and reported for individual children. However, because of the nature of the scores and the fact they are statistical estimates (see ‘Confidence bands’ below), the scores are much more reliable when calculating for groups of children. In addition, if reported to parents, the fact that a child who is making typical progress from year to year will remain on a similar age standardised score will need to be explained.
- Similarly, standardised scores could be used to consider differences in performance between boys and girls, or between children who are learning English as an additional language and those who are not, in your school. (This will give you useful information only if the group is reasonably large; the average of just a few children is not a reliable indicator.)

National comparisons – using the shaded bands

The tables of standardised scores are divided into five shaded bands. These bands give an indication of how the scores relate to the national population. The band nearest the top of a table contains the scores that correspond to the lowest fifth of the population; the next band, the next fifth; and so on. If a child has a score in the final band, you know that his or her score is in the top 20 per cent nationally, once age has been taken into account. The level 3 test provides bands for the top three-fifths of the population only.

Very low and very high standardised scores are printed in the table as ***. This means that they would be below the lowest score in the table or above the highest, but cannot be calculated with the necessary degree of statistical reliability. If an exact score is needed, for example to calculate an average for the class, the next score below or above should be used as appropriate for these children. For example, 95 or 140 should be used in the level 3 test.

Confidence bands

Any scores derived from a short test are subject to some margin of error. A margin of error does not mean children have been assessed incorrectly. It is simply a statistical estimate, based on the fact that tests can only sample the particular area of learning that they assess. To indicate how wide this margin of error is likely to be, a ‘90 per cent confidence band’ has been calculated. This means that you can be 90 per cent sure that the child’s true score lies within the confidence band. The 90 per cent confidence band is plus or minus 8 marks for the level 2 test and plus or minus 10 marks for the level 3 test. So, for example, if a child has a standardised score of 110 in the level 2 test, you can be 90 per cent certain that the true score is between 102 and 118.

Mathematics test – level 2

Raw score	Age in years and months																		
	6.05	6.06	6.07	6.08	6.09	6.10	6.11	7.00	7.01	7.02	7.03	7.04	7.05	7.06	7.07	7.08	7.09	7.10	7.11
0	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
1	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
2	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
3	73	72	70	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
4	79	78	77	76	75	73	72	70	***	***	***	***	***	***	***	***	***	***	***
5	83	82	81	80	80	78	77	76	75	74	72	71	***	***	***	***	***	***	***
6	85	84	84	83	82	82	81	80	79	78	77	76	74	73	71	70	***	***	***
7	87	86	85	85	84	84	83	83	82	81	80	79	78	77	76	74	73	72	70
8	88	87	87	86	86	85	85	84	84	83	82	82	81	80	79	78	77	75	74
9	90	89	88	88	87	87	86	86	85	85	84	83	83	82	81	80	80	78	77
10	91	91	90	89	89	88	87	87	86	86	85	85	84	84	83	82	82	81	80
11	93	92	91	91	90	89	89	88	88	87	87	86	86	85	84	84	83	83	82
12	95	94	93	92	92	91	90	90	89	88	88	87	87	86	86	85	85	84	83
13	96	95	95	94	93	92	92	91	90	90	89	88	88	87	87	86	86	85	85
14	98	97	96	96	95	94	93	93	92	91	90	90	89	89	88	87	87	86	86
15	99	98	98	97	96	96	95	94	93	93	92	91	90	90	89	89	88	87	87
16	100	100	99	99	98	97	96	96	95	94	93	93	92	91	91	90	89	89	88
17	102	101	100	100	99	99	98	97	97	96	95	94	94	93	92	91	91	90	89
18	103	102	102	101	101	100	99	99	98	97	97	96	95	94	94	93	92	91	91
19	104	103	103	102	102	101	101	100	100	99	98	98	97	96	95	95	94	93	92
20	105	105	104	104	103	103	102	101	101	100	100	99	98	98	97	96	96	95	94
21	107	106	105	105	104	104	103	103	102	102	101	101	100	99	99	98	97	97	96
22	108	108	107	106	106	105	105	104	104	103	103	102	101	101	100	100	99	98	98
23	110	109	109	108	107	107	106	106	105	105	104	103	103	102	102	101	101	100	100
24	112	111	111	110	109	109	108	107	107	106	106	105	105	104	104	103	102	102	101
25	115	114	113	113	112	111	110	110	109	108	108	107	107	106	105	105	104	104	103
26	118	117	116	116	115	114	113	113	112	111	111	110	109	108	108	107	107	106	105
27	***	121	120	120	119	118	117	117	116	115	114	114	113	112	111	111	110	109	109
28	***	***	***	***	***	***	***	***	***	120	120	119	118	117	117	116	115	114	114
29	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	124	123	123	122
30	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

Very low and very high scores are printed in the table as ***.
This means that they would be below 70 or above 124.

Mathematics test – level 3

Raw score

Age in years and months

	6.05	6.06	6.07	6.08	6.09	6.10	6.11	7.00	7.01	7.02	7.03	7.04	7.05	7.06	7.07	7.08	7.09	7.10	7.11		
0	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
1	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
2	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
3	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
4	99	98	97	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
5	102	101	100	99	99	98	97	***	***	***	***	***	***	***	***	***	***	***	***	***	
6	105	104	103	102	101	101	100	99	98	97	***	***	***	***	***	***	***	***	***	***	
7	107	106	106	105	104	103	102	101	100	99	99	98	97	***	***	***	***	***	***	***	
8	109	109	108	107	106	105	104	104	103	102	101	100	99	98	97	96	***	***	***	***	
9	111	110	110	109	108	107	106	106	105	104	103	102	101	100	99	98	98	97	***	***	
10	113	112	111	111	110	109	108	107	107	106	105	104	103	102	101	100	100	99	98	***	
11	114	114	113	112	111	111	110	109	108	107	107	106	105	104	103	102	101	101	100	***	
12	116	115	114	114	113	112	111	111	110	109	108	107	107	106	105	104	103	102	101	100	
13	117	117	116	115	114	114	113	112	111	111	110	109	108	107	107	106	105	104	103	102	
14	119	118	117	117	116	115	114	114	113	112	111	111	110	109	108	107	107	106	105	104	
15	120	119	119	118	117	116	116	115	114	114	113	112	111	111	110	109	108	107	106	105	
16	121	121	120	119	119	118	117	116	116	115	114	114	113	112	111	110	110	109	108	107	
17	123	122	121	121	120	119	118	118	117	116	116	115	114	113	113	112	111	110	109	108	
18	124	123	123	122	121	121	120	119	118	118	117	116	116	115	114	113	113	112	111	110	
19	126	125	124	123	123	122	121	121	120	119	118	118	117	116	116	115	114	113	112	111	
20	127	126	126	125	124	123	123	122	121	121	120	119	119	118	117	116	116	115	114	113	
21	128	128	127	126	126	125	124	124	123	122	122	121	120	119	119	118	117	117	116	115	
22	130	129	129	128	127	127	126	125	125	124	123	122	122	121	120	120	119	118	118	117	
23	131	131	130	130	129	128	128	127	126	126	125	124	124	123	122	121	121	120	119	118	
24	133	132	132	131	131	130	129	129	128	127	127	126	125	125	124	123	123	122	121	120	
25	134	134	133	133	132	132	131	131	130	130	129	128	128	127	126	126	125	124	124	123	
26	136	135	135	135	134	134	133	133	132	132	131	131	130	129	129	128	127	127	126	125	
27	137	137	137	136	136	136	135	135	134	134	134	133	133	132	131	131	130	130	129	128	
28	139	139	139	138	138	138	137	137	137	137	136	136	135	135	135	134	134	133	133	132	
29	***	***	***	***	***	***	***	***	139	139	139	139	139	139	138	138	138	137	137	136	
30	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	139	138

Very low and very high scores are printed in the table as ***.
This means that they would be below 96 or above 139.

For more copies (for any purpose other than statutory assessment), contact:

QCA Orderline, PO Box 29, Norwich NR3 1GN

(tel: 08700 606015; fax: 08700 606017; email: orderline@qca.org.uk)

Order refs: QCA/06/2805 (teacher pack)

QCA/06/2816 (pupil pack – level 2)

QCA/06/2817 (pupil pack – level 3)