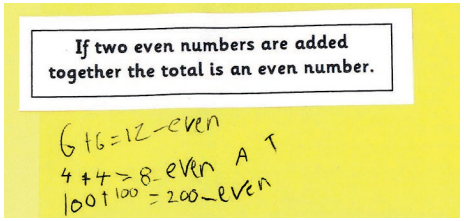
Working at greater depth within the expected standard

GD1. The pupil can reason about addition (e.g. pupil can reason that the sum of 3 odd numbers will always be odd).	
GD2. The pupil can use multiplication facts to make deductions outside known multiplication facts (e.g. a pupil knows that multiples of 5 have one digit of 0 or 5 and uses this to reason that 18 × 5 cannot be 92 as it is not a multiple of 5).	
GD3. The pupil can work out mental calculations where regrouping is required (e.g. 52 − 27; 91 – 73).	
GD4. The pupil can solve more complex missing number problems (e.g. 14 + □ – 3 = 17; 14 + Δ = 15 + 27).	
GD5. The pupil can determine remainders given known facts (e.g. given 15 ÷ 5 = 3 and has a remainder of 0, pupil recognises that 16 ÷ 5 will have a remainder of 1; knowing that 2 × 7 = 14 and 2 × 8 = 16, pupil explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left).	
GD6. The pupil can solve word problems that involve more than one step (e.g. which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?).	
GD7. The pupil can recognise the relationships between addition and subtraction and can rewrite addition statements as simplified multiplication statements (e.g. 10 + 10 + 10 + 5 + 5 = 3 × 10 + 2 × 5 = 4 × 10).	
GD8. The pupil can find and compare fractions of amounts	
GD9. The pupil can read the time on the clock to the nearest 5 minutes.	
GD10. The pupil can read scales in divisions of ones, twos, fives and tens in a practical situation where not all numbers on the scale are given.	
GD11. The pupil can describe similarities and differences of shape properties (e.g. finds 2 different 2-D shapes that only have one line of symmetry; that a cube and a cuboid have the same number of edges, faces and vertices but can describe what is different about them).	

Possible Assessment Activities

GD1. The pupil can reason about addition (e.g. pupil can reason that the sum of 3 odd numbers will always be odd).
Resources required statement cards
Assessment Challenge: I can reason about addition **Always, Sometimes, Never** Take a challenge statement and investigate whether the statement is always, sometimes or never true e.g. 

Supporting resource

if you add two even numbers you will always get an even answer	If you add two odd numbers you will always get an odd number	If you add an even and an odd number you will always get an odd number	If an odd number is subtracted from an even number you will always get an odd answer
if you add 3 odd numbers together you will always get and odd answer	If an even number is halved you will always get an odd number	If an even number is doubled you will always get an even answer	If any number is doubled you will always get and even answer
no matter how many even numbers you add together, the answer will always be even			

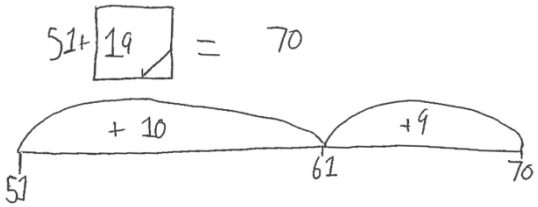
GD2. The pupil can use multiplication facts to make deductions outside known multiplication facts (e.g. a pupil knows that multiples of 5 have one digit of 0 or 5 and uses this to reason that 18 × 5 cannot be 92 as it is not a multiple of 5).

Resources required

Assessment Challenge: I can reason about multiplication

For each calculation pick a number that could reasonably be the answer and explain why you think this.

19 x 5	84	95	93	19 x 2	35	33	38
19 x 10	190	185	187	17 x 2	34	35	33

GD3. The pupil can work out mental calculations where regrouping is required (e.g. 52 – 27; 91 – 73).
Resources required addition challenge
Assessment Challenge: I can add and subtract 2 digit numbers where regrouping is needed Take the challenge cards and use mental strategies or number lines to support your addition e.g. 

Supporting resource

Challenge 43 + 37	Challenge 53 – 25	Challenge 55 + 29	Challenge 32 - 15
Challenge 66 + 27	Challenge 77 – 29	Challenge 44 + 66	Challenge 90 – 17

GD4. The pupil can solve more complex missing number problems (e.g. 14 + ☐ – 3 = 17; 14 + Δ = 15 + 27).

Resources required

resource required to support calculation

Assessment Challenge: I can solve missing number problems

Solve the missing box problems, you can use bar models or part- whole models to support you

[ ] + 11 = 25 + 14	**17+ 15 = [ ] + 12**
8 + 18 + 5 = 3 + [ ] + 13	**[ ] + 2 + 21 = 22 + 12 + 4**

GD5. The pupil can determine remainders given known facts (e.g. given 15 ÷ 5 = 3 and has a remainder of 0, pupil recognises that 16 ÷ 5 will have a remainder of 1; knowing that 2 × 7 = 14 and 2 × 8 = 16, pupil explains that making pairs of socks from 15 identical socks will give 7 pairs and one sock will be left).

Resources required

Assessment task: I can solve problems that might have remainders

The sock challenge, can you work out the different sock challenges

5 pairs of socks = [ ] socks altogether 10 pairs of socks = [ ] socks altogether	15 socks = [ ] pairs of socks	19 socks = [ ] pairs of socks

GD6. The pupil can solve word problems that involve more than one step (e.g. which has the most biscuits, 4 packets of biscuits with 5 in each packet or 3 packets of biscuits with 10 in each packet?).
Resources required **Word problems that involve addition subtraction, multiplication and halves and doubles**
Assessment Challenge: I can solve two step problems Pick a challenge card to solve. Use your written and mental methods to help you solve the problems

GD7a. The pupil can recognise the relationships between addition and subtraction and can rewrite addition statements as simplified multiplication statements (e.g. 10 + 10 + 10 + 5 + 5 = 3 × 10 + 2 × 5 = 4 × 10).

Resources required

Assessment Challenge: I can recognise relationships between addition and subtraction and multiplication

Ice cream challenge

I have £1.00 to spend. I buy a mix of ice creams (10p), lollies (5p) and ice pops (2p).

Show 3 different ways of spending **exactly** £1.00.

GD7b. The pupil can recognise the relationships between addition and subtraction and can rewrite addition statements as simplified multiplication statements (e.g. 10 + 10 + 10 + 5 + 5 = 3 × 10 + 2 × 5 = 4 × 10).
Resources required grid paper / peg boards/ multi link cubes which will resource modelling arrays
Assessment Challenge: I can recognise relationships between addition and subtraction and multiplication Using the amounts 18, 20 and 24, what arrays can you make? Can you write any calculation sentences to go with the arrays?

GD8. The pupil can find and compare fractions of amounts

Resources required

Assessment Challenge: I can compare fractions of amounts

Read each statement carefully. Show your working out each time then ring the correct answer.

Which is greater, **½ of 16 or ¼ of 20?**	**Which is greater,** **¼ of 1 metre or ½ of 60cm?**	**Who has more?** **Tom has ½ of £10 Ben has ¼ of £24**