# Starting check A

Name: _____ Date: _____

3.1. Calculate 56 ÷ 7 and 8 × 6.

3.2. Find the highest common factor of 18 and 24.

3.3. Complete 1/2 = __/10.

3.4. Write 0.6 as a fraction in simplest form.

3.5. Find 10% of 150 and 50% of 38.

3.6. Put 0.7, 0.07 and 0.65 in ascending order.

Matches book page 3. Answers on book page 55.

# Starting check B

Name: _____ Date: _____

4.1. Simplify 12/20 fully.

4.2. Calculate 1/4 + 1/2.

4.3. Write 25% as a decimal and a simplified fraction.

4.4. Find 3/4 of 28.

4.5. A £40 price has 10% off. Find the new price.

4.6. £36 is a price after 10% off. What percentage of the original price is £36?

Matches book page 4. Answers on book page 55.

# Understanding a fraction

Name: _____ Date: _____

Matches book page 5. Answers on book page 55.

5.1. A strip has 12 equal sections. Five are shaded. State the shaded and unshaded fractions.

5.2. A bag has 9 red counters and 6 blue counters. What fraction are blue? Give the simplest form.

5.3. Two diagrams each shade one piece. One whole is split into 3 equal pieces and the other into 6 equal pieces. Do the shaded pieces represent the same fraction? Explain.

Check page 55. Correct one error and explain the method.

My next step: _____

# Equivalent fractions

Name: _____ Date: _____

Matches book page 6. Answers on book page 55.

6.1. Complete 3/5 = __/20. Show the scale factor.

6.2. Complete 7/8 = 35/__. Explain how you found the denominator.

6.3. Sam says 2/3 = 4/5 because both numbers increased by 2. Is Sam correct? Justify your answer.

Check page 55. Correct one error and explain the method.

My next step: _____

# Building equivalent fractions

Name: _____ Date: _____

Matches book page 7. Answers on book page 55.

7.1. Complete both: 2/7 = __/21 and 5/6 = 20/__.

7.2. Complete 9/12 = __/4. Explain the operation applied to both numbers.

7.3. A pupil writes 3/4 = 12/20. Correct the denominator on the right and justify the change.

Check page 55. Correct one error and explain the method.

My next step: _____

# Simplifying fractions

Name: _____ Date: _____

Matches book page 8. Answers on book page 55.

8.1. Simplify 15/25 fully.

8.2. Simplify 42/56 fully. Show a common factor.

8.3. A pupil simplifies 18/30 to 9/15 and stops. Give the fully simplified answer and explain what remains to do.

Check page 55. Correct one error and explain the method.

My next step: _____

# Simplifying in context

Name: _____ Date: _____

Matches book page 9. Answers on book page 55.

9.1. A class has 14 pupils wearing trainers and 21 not wearing trainers. What fraction wear trainers?

9.2. Simplify 45/30. Give your answer as an improper fraction and a mixed number.

9.3. A pupil writes 16/64 = 1/4 by crossing out the digit 6. The final value happens to be correct. Give a valid division method and explain why digit crossing is unreliable.

Check page 55. Correct one error and explain the method.

My next step: _____

# Comparing fractions

Name: _____ Date: _____

Matches book page 10. Answers on book page 56.

10.1. Insert <, > or = between 2/3 and 3/5. Show equivalent fractions.

10.2. Put 1/2, 5/6 and 2/3 in ascending order (smallest first).

10.3. Aisha says 3/7 is greater than 3/5 because 7 is greater than 5. Explain the mistake.

Check page 56. Correct one error and explain the method.

My next step: _____

# Ordering and locating fractions

Name: _____ Date: _____

Matches book page 11. Answers on book page 56.

11.1. Order 3/8, 1/2 and 5/12 from smallest to largest. Show a common denominator.

11.2. Which of 7/6, 5/8 and 9/10 is greater than 1? Explain.

11.3. A number line runs from 0 to 1 and is split into 10 equal intervals. What fraction is at the seventh division after 0? Is it greater than 2/3? Justify.

Check page 56. Correct one error and explain the method.

My next step: _____

# Mixed and improper fractions

Name: _____ Date: _____

Matches book page 12. Answers on book page 56.

12.1. Write 3 2/5 as an improper fraction.

12.2. Write 19/6 as a mixed number.

12.3. A recipe uses 1 3/4 cups of flour per batch. How many cups are needed for two batches? Give a mixed number.

Check page 56. Correct one error and explain the method.

My next step: _____

# Using mixed numbers

Name: _____ Date: _____

Matches book page 13. Answers on book page 56.

13.1. Convert 2 5/6 and 4 1/4 to improper fractions.

13.2. Convert 29/8 and 17/3 to mixed numbers.

13.3. A ribbon is 11/4 metres long. Write this as a mixed number. How much longer than 2 metres is it?

Check page 56. Correct one error and explain the method.

My next step: _____

# Adding with matching denominators

Name: _____ Date: _____

Matches book page 14. Answers on book page 56.

14.1. Calculate 5/12 + 1/12 and simplify.

14.2. Calculate 11/15 - 2/15 and simplify.

14.3. A tank is 5/8 full. More water equal to 4/8 of its capacity is poured in. What fraction of a tankful is this in total? How much overflows?

Check page 56. Correct one error and explain the method.

My next step: _____

# Adding and subtracting

Name: _____ Date: _____

Matches book page 15. Answers on book page 57.

15.1. Calculate 2/5 + 1/10. Give the simplest form.

15.2. Calculate 7/8 - 1/4.

15.3. A jug contains 1/3 litre of juice. Another 1/2 litre is added. A pupil says the total is 2/5 litre. Find the correct total and explain why the pupil’s answer cannot be right.

Check page 57. Correct one error and explain the method.

My next step: _____

# Subtracting unlike fractions

Name: _____ Date: _____

Matches book page 16. Answers on book page 57.

16.1. Calculate 4/5 - 1/3.

16.2. Calculate 7/10 - 2/5 and simplify.

16.3. A route is 7/8 km long. A walker completes 1/3 km. How much of the route remains, in km?

Check page 57. Correct one error and explain the method.

My next step: _____

# Adding and subtracting mixed numbers

Name: _____ Date: _____

Matches book page 17. Answers on book page 57.

17.1. Calculate 1 1/4 + 2 1/2. Give a mixed number.

17.2. Calculate 3 1/5 - 1 3/5.

17.3. A board is 4 1/2 metres long. A 2 3/4 metre piece is cut off. How long is the remaining piece?

Check page 57. Correct one error and explain the method.

My next step: _____

# Multiplying fractions

Name: _____ Date: _____

Matches book page 18. Answers on book page 57.

18.1. Calculate 2/3 × 3/5. Simplify.

18.2. Calculate 1 1/2 × 2/3.

18.3. Three quarters of a garden is planted. Two thirds of the planted area has vegetables. What fraction of the whole garden has vegetables?

Check page 57. Correct one error and explain the method.

My next step: _____

# Multiplying mixed numbers

Name: _____ Date: _____

Matches book page 19. Answers on book page 57.

19.1. Calculate 1 1/4 × 2/5.

19.2. Calculate 2 1/3 × 1 1/2.

19.3. A recipe uses 1 1/2 cups of oats. You make 2 1/2 times the recipe. How many cups of oats do you need?

Check page 57. Correct one error and explain the method.

My next step: _____

# Dividing fractions

Name: _____ Date: _____

Matches book page 20. Answers on book page 58.

20.1. Calculate 2/3 ÷ 1/6.

20.2. Calculate 5/8 ÷ 5/4. Simplify.

20.3. A container holds 1 1/2 litres. Each full bottle holds 1/4 litre. How many full bottles can be filled?

Check page 58. Correct one error and explain the method.

My next step: _____

# Division and reciprocals

Name: _____ Date: _____

Matches book page 21. Answers on book page 58.

21.1. Write the reciprocal of 7/9. Check it by multiplication.

21.2. Calculate 3/5 ÷ 9/10.

21.3. A rope is 2 1/4 metres long. Each complete piece needs 3/8 metre. How many complete pieces can be cut, assuming no cutting loss?

Check page 58. Correct one error and explain the method.

My next step: _____

# Fraction checkpoint

Name: _____ Date: _____

Matches book page 22. Answers on book page 58.

22.1. Calculate 2/3 + 5/6. Give a mixed number.

22.2. Calculate 3/4 ÷ 3/8. Explain why the answer is a whole number.

22.3. A project has 60 tickets. It sells 2/5 of them in the morning and 1/3 of the original total in the afternoon. How many tickets remain?

Check page 58. Correct one error and explain the method.

My next step: _____

# Tenths and hundredths

Name: _____ Date: _____

Matches book page 23. Answers on book page 58.

23.1. Write 0.9 and 0.09 as fractions.

23.2. Write 0.48 as a fraction in simplest form.

23.3. Explain why 0.50 = 0.5, but 0.05 is different. Give simplified fractions.

Check page 58. Correct one error and explain the method.

My next step: _____

# Fractions decimals and percentages

Name: _____ Date: _____

Matches book page 24. Answers on book page 58.

24.1. Write 3/4 as a decimal and a percentage.

24.2. Write 0.35 as a percentage and a fraction in simplest form.

24.3. Order 0.6, 5/8 and 62% from smallest to largest. Show a common form.

Check page 58. Correct one error and explain the method.

My next step: _____

# Decimals to fractions

Name: _____ Date: _____

Matches book page 25. Answers on book page 59.

25.1. Write 0.45 and 0.08 as fractions in simplest form.

25.2. Write 0.625 as a simplified fraction.

25.3. A pupil writes 1.25 = 1/4. Correct the answer as an improper fraction and explain the missing whole.

Check page 59. Correct one error and explain the method.

My next step: _____

# Fractions to decimals

Name: _____ Date: _____

Matches book page 26. Answers on book page 59.

26.1. Write 7/10 and 3/20 as decimals.

26.2. Write 7/8 as a decimal. Show division or an equivalent fraction.

26.3. A measurement is 11/4 metres. Give its decimal value and explain why 0.275 metres cannot be right.

Check page 59. Correct one error and explain the method.

My next step: _____

# Percentages and decimals

Name: _____ Date: _____

Matches book page 27. Answers on book page 59.

27.1. Write 8% and 80% as decimals.

27.2. Write 0.04 and 1.35 as percentages.

27.3. A pupil uses 0.5 as the multiplier for 5% of an amount. Give the correct multiplier and identify what percentage 0.5 represents.

Check page 59. Correct one error and explain the method.

My next step: _____

# Percentages and fractions

Name: _____ Date: _____

Matches book page 28. Answers on book page 59.

28.1. Write 18% as a fraction in simplest form.

28.2. Write 7/20 and 9/8 as percentages.

28.3. Write 12.5% as a simplified fraction. Explain your conversion.

Check page 59. Correct one error and explain the method.

My next step: _____

# Comparing different forms

Name: _____ Date: _____

Matches book page 29. Answers on book page 59.

29.1. Order 0.45, 1/2 and 48% from smallest to largest.

29.2. Which is greater: 7/8 or 86%? Give a calculation.

29.3. A pupil says 0.375 is greater than 0.4 because 375 is greater than 4. Correct the comparison using thousandths.

Check page 59. Correct one error and explain the method.

My next step: _____

# Conversion checkpoint

Name: _____ Date: _____

Matches book page 30. Answers on book page 60.

30.1. Complete: 0.72 = __% = __/25.

30.2. Complete: 3/8 = decimal __ = percentage __.

30.3. A target is represented by 0.65, 13/20 and 65%. Are all three equal? Prove your answer.

Check page 60. Correct one error and explain the method.

My next step: _____

# Useful percentage benchmarks

Name: _____ Date: _____

Matches book page 31. Answers on book page 60.

## 31.1. Find 50% of 86 and 25% of 120.

## 31.2. Find 5% and 1% of £240.

## 31.3. Find 35% of 180 without a calculator. Show useful percentage parts.

Check page 60. Correct one error and explain the method.

My next step: _____

# Finding a percentage of an amount

Name: _____ Date: _____

Matches book page 32. Answers on book page 60.

32.1. Find 25% of 84.

32.2. Find 15% of £60. Show a method.

32.3. An order contains 240 exercise books. Thirty-five per cent are blue. How many are blue?

Check page 60. Correct one error and explain the method.

My next step: _____

# Using percentage multipliers

Name: _____ Date: _____

Matches book page 33. Answers on book page 60.

33.1. Find 12% of 350.

33.2. Find 7.5% of £160.

33.3. A charity receives £725. It allocates 18% to equipment. How much is allocated, and how much remains?

Check page 60. Correct one error and explain the method.

My next step: _____

# Percentages above one hundred

Name: _____ Date: _____

Matches book page 34. Answers on book page 60.

34.1. Find 125% of 80.

34.2. Find 240% of £50.

34.3. Find 150% of £60, then increase £60 by 150%. Explain why the two answers differ.

Check page 60. Correct one error and explain the method.

My next step: _____

# One amount as a percentage

Name: _____ Date: _____

Matches book page 35. Answers on book page 61.

35.1. Express 21 out of 30 as a percentage.

35.2. A club has 18 members and a target of 15 members. Its membership is what percentage of its target?

35.3. A container holds 200 g and a larger one holds 250 g. Express 200 g as a percentage of 250 g.

Check page 61. Correct one error and explain the method.

My next step: _____

# Calculating percentage change

Name: _____ Date: _____

Matches book page 36. Answers on book page 61.

36.1. A price rises from £50 to £58. Find the percentage increase.

36.2. Attendance falls from 240 to 210. Find the percentage decrease.

36.3. A price rises from £80 to £100. A pupil calls this a 20% increase by dividing 20 by 100. Find the correct increase and explain the denominator.

Check page 61. Correct one error and explain the method.

My next step: _____

# Percentage increase and decrease

Name: _____ Date: _____

Matches book page 37. Answers on book page 61.

37.1. Increase £80 by 12%.

37.2. Reduce £150 by 18%.

37.3. A price rises from £40 to £46. Calculate the percentage increase, using the original price as the reference.

Check page 61. Correct one error and explain the method.

My next step: _____

# Discounts and final prices

Name: _____ Date: _____

Matches book page 38. Answers on book page 61.

38.1. A £48 item has 25% off. Find its sale price.

38.2. A £125 order has 12% off, then £6 delivery is added. Find the total.

38.3. Shop A sells a £70 item with 20% off and £5 delivery. Shop B sells it for £62 with free delivery. Which is cheaper and by how much?

Check page 61. Correct one error and explain the method.

My next step: _____

# Reversing a discount with parts

Name: _____ Date: _____

Matches book page 39. Answers on book page 61.

39.1. After 25% off, a price is £45. Use the 1% method to find the original.

39.2. After 40% off, a price is £72. Find the original.

39.3. A sale price of £90 follows a 10% discount. A pupil adds £9 to get an original of £99. Use a forward check to show the mistake, then find the original.

Check page 61. Correct one error and explain the method.

My next step: _____

# Finding the original amount

Name: _____ Date: _____

Matches book page 40. Answers on book page 62.

40.1. A coat costs £64 after a 20% discount. Find its original price.

40.2. A fee is £138 after a 15% increase. Find the original fee.

40.3. A pupil says a £72 sale price after a 10% discount means the original was £79.20. Find the correct original and explain the mistake.

Check page 62. Correct one error and explain the method.

My next step: _____

# Reversing a percentage increase

Name: _____ Date: _____

Matches book page 41. Answers on book page 62.

41.1. A price is £115 after a 15% increase. Find the original price.

41.2. A population count is 264 after a 10% increase. Find the original count.

41.3. A fee becomes £144 after a 20% rise. A pupil subtracts 20% of £144 to get £115.20. Give the correct original and a check.

Check page 62. Correct one error and explain the method.

My next step: _____

# Successive percentage changes

Name: _____ Date: _____

Matches book page 42. Answers on book page 62.

42.1. An £80 item is reduced by 25%, then the reduced price is reduced by 10%. Find the final price.

42.2. £200 rises by 20% and then falls by 20%. Find the final amount.

42.3. A pupil says a 10% discount followed by a 20% discount is a 30% discount overall. Use multipliers to find the actual overall discount.

Check page 62. Correct one error and explain the method.

My next step: _____

# Simple interest

Name: _____ Date: _____

Matches book page 43. Answers on book page 62.

43.1. Find the simple interest on £500 at 4% per year for 3 years.

43.2. £800 earns 2.5% simple interest per year for 2 years. Find the final total.

43.3. A £300 loan charges 5% simple interest per year for 4 years, with no other charges. Find the total repayment.

Check page 62. Correct one error and explain the method.

My next step: _____

# Explaining simple interest

Name: _____ Date: _____

Matches book page 44. Answers on book page 62.

44.1. £400 earns £48 simple interest over 3 years. Find the annual rate.

44.2. A £250 deposit earns 6% simple interest per year. How many whole years are needed to earn £60 interest?

44.3. Two £500 deposits offer 3% simple interest for 4 years or 4% simple interest for 3 years. Compare the interest and final totals.

Check page 62. Correct one error and explain the method.

My next step: _____

# Fractions of amounts

Name: _____ Date: _____

Matches book page 45. Answers on book page 63.

45.1. Find 5/8 of 96.

45.2. A class has 32 pupils. Three eighths walk to school. How many do not walk?

45.3. A project has £120. It spends 1/4 of this, then 1/3 of the money remaining. How much is left?

Check page 63. Correct one error and explain the method.

My next step: _____

# Choosing and explaining a method

Name: _____ Date: _____

Matches book page 46. Answers on book page 63.

46.1. A £90 bag has 20% off, then £5 delivery is added. Find the total cost.

46.2. Shop A sells a £60 jacket with 15% off and free delivery. Shop B charges £49 plus £4 delivery. Which is cheaper and by how much?

46.3. A hall has 120 seats. Three fifths are occupied. Later, 25% of the empty seats are taken. How many seats are occupied now?

Check page 63. Correct one error and explain the method.

My next step: _____

# Mixed revision with fractions

Name: _____ Date: _____

Matches book page 47. Answers on book page 63.

47.1. Calculate 3/5 + 7/10. Give a mixed number.

47.2. Calculate 1 1/2 ÷ 3/4.

47.3. A 48-page booklet has 3/8 of its pages completed. Then 1/3 of the remaining pages are completed. How many pages are still unfinished?

Check page 63. Correct one error and explain the method.

My next step: _____

# Mixed revision with percentages

Name: _____ Date: _____

Matches book page 48. Answers on book page 63.

48.1. Find 22% of £450.

48.2. A cost falls from £160 to £136. Find the percentage decrease.

48.3. A ticket price is £54 after a 20% increase. Find the original price.

Check page 63. Correct one error and explain the method.

My next step: _____

# Planning a group budget

Name: _____ Date: _____

Matches book page 49. Answers on book page 63.

49.1. A group has £360. It spends 1/3 on travel, then 25% of the remaining money on food. How much remains?

49.2. Twenty-four notebooks cost £2.50 each before discount. A 10% discount applies to the notebook total, then £4 delivery is added. Find the final cost.

49.3. A £200 budget pays for 3 kits at £48 each, with 15% off the kit total. Delivery costs £6. How much of the budget remains?

Check page 63. Correct one error and explain the method.

My next step: _____

# Interpreting group data

Name: _____ Date: _____

Matches book page 50. Answers on book page 64.

50.1. Of 80 pupils, 28 choose music. Write this as a simplified fraction and a percentage.

50.2. An activity has 45 participants, up from 36. Find the percentage increase.

50.3. A club has 120 members: 35% choose football and 1/4 choose art. No member chooses both. How many choose neither?

Check page 64. Correct one error and explain the method.

My next step: _____

# Finding and correcting mistakes

Name: _____ Date: _____

Matches book page 51. Answers on book page 64.

51.1. A pupil says 2/3 × 3/4 = 6/7. Correct the answer and identify the operation error.

51.2. A pupil says 0.08 = 80%. Correct the percentage and explain using hundredths.

51.3. A pupil finds a 20% increase on £50 by calculating 50 × 0.2 = £10 and gives £10 as the new price. Give the correct new price and explain what £10 represents.

Check page 64. Correct one error and explain the method.

My next step: _____

# Choose a method and justify it

Name: _____ Date: _____

Matches book page 52. Answers on book page 64.

52.1. A £100 voucher pays for an £80 item with 15% off and £5 delivery. How much voucher value is left?

52.2. Two suppliers sell identical packs. A charges £96 with 25% off. B charges £70 plus £3 delivery. Which final total is lower, and by how much?

52.3. A tank contains 180 litres. First, 2/5 is used. Then 25% of the remaining water is used. How much water is left? Explain the two different starting amounts.

Check page 64. Correct one error and explain the method.

My next step: _____

# Final assessment A

Name: _____ Date: _____

Matches book page 53. Answers on book page 64.

53.1. Write 0.375 as a simplified fraction and a percentage. Show how you obtain each answer. [4 marks]

53.2. Calculate 2/3 + 3/4. Give your answer as an improper fraction and as a mixed number. Show your working. [4 marks]

53.3. A group has 48 pupils. Three eighths choose art. Half of the remaining pupils choose music; the rest choose sport. How many choose each activity? [4 marks]

Assessment total: ____ /24 across both pages. This is not a GCSE grade.

My next step: _____

# Final assessment B

Name: _____ Date: _____

Matches book page 54. Answers on book page 64.

54.1. A £180 item is reduced by 15%. A £6 delivery charge is then added. Find the discount, sale price and final total. [4 marks]

54.2. A ticket costs £63 after a 30% discount. Find the original price. Check your answer by applying the discount to it. [4 marks]

54.3. Offer A gives 20% off a £100 item, then another 10% off the reduced price. Offer B gives 30% off a £100 item. Delivery is free for both. Find both final prices and decide which offer is cheaper and by how much. [4 marks]

Assessment total: ____ /24 across both pages. This is not a GCSE grade.

My next step: _____