National Numeracy Strategy

Unit 11
Reasoning about numbers

Year 5
Spring term

This Unit Plan is designed to guide your teaching.
You will need to adapt it to meet the needs of your class.

Unit Objectives

Year 5

	Supplement of Examples
• Recognise and extend number sequences formed by counting from any number in steps of constant size, extending beyond zero when counting back. For example: count in steps of 25 to 1000 and then back; count on or back in steps of 0.1, 0.2, 0.3…	Page 17
• Recognise multiples of 6, 7, 8 and 9 up to the tenth multiple. Know and apply tests of divisibility by 2, 4, 5, 10 or 100.	Page 19
• Make and investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.	Page 81
• Suggest extensions by asking 'What if…?'.	Page 79

Year 4

- Recognise and extend number sequences formed by counting from any number in steps of constant size, extending beyond zero when counting back: for example count on in steps of 25 to 500 and then back to say –100.
- Recognise multiples of 2, 3, 4, 5 and 10 up to the tenth multiple.
- Make and investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.
- Suggest extensions by asking 'What if…?'.

Link Objectives

Year 6

- Recognise and extend number sequences, such as the sequence of square numbers, or the sequence of triangular numbers 1, 3, 6, 10 and 15… .
- Recognise multiples up to 10 x 10. Know and apply simple tests of divisibility. Find simple common multiples.
- Make and investigate a general statement about familiar numbers or shapes by finding examples that satisfy it.
- Suggest extensions by asking 'What if…?'.

(Key objectives in bold)

Resources needed to teach this unit:

- OHT 11.1
- OHT 11.2
- OHT 11.3
- OHT 11.4
- OHT 11.5
- Resource sheet 11.1a
- Resource sheet 11.1b
- Resource sheet 11.1c
- Resource sheet 11.1d
- Resource sheet 11.2
- Resource sheet 11.3
- Resource sheet 11.4
- Counters
- Large sheet of paper
- Whiteboards
- OHP calculator
- Class set of calculators
- Interactive teaching program 'Number grid' from the disk included in this pack.

department for education and skills

Planning sheet	Day One (page 1 of 2)	Unit 11 *Reasoning about numbers*	Term: *Spring*	Year Group: *5*

Oral and Mental

Objectives and Vocabulary	Teaching Activities
Recognise multiples of 6 and 7. VOCABULARY multiple RESOURCES OHT 11.1 OHT 11.2 Whiteboards	• Remind children that 50 is a multiple of 5 and 10. Ask for other multiples of 5 to ensure children understand the term multiple. Display OHT 11.1. **Q** Which numbers are multiples of 6? Ask children to record the numbers on their whiteboards and show their answers. Collect answers and correct any errors. • Repeat asking: **Q** Which multiples of 7 can you see? Give the children 30 seconds to write on their whiteboards numbers they recognise as multiples of 7. Collect and discuss answers. **Q** Are there any numbers which are multiples of 6 and 7? Establish that 42 is a multiple of 6 and 7. • Point out that the only numbers not multiples of 6 or 7 were 41 and 37. **Q** How far away from a multiple of 6 or 7 are these two numbers? Agree that 41 is 1 less than 42, a multiple of 7, and 37 is 1 more than 36, a multiple of 6.

Main Teaching

Objectives and Vocabulary	Teaching Activities
Recognise and extend number sequences formed by counting on or back from any number in steps of constant size. VOCABULARY sequence term rule ascending descending generate RESOURCES OHP OHP calculator Calculators Whiteboards	• On the board write 5, 9, 13, 17. Tell the children that this list of numbers is generated by a rule. **Q** What is the rule? Discuss children's suggestions and agree the rule is add 4. Say that a list like this is called a sequence and the numbers in the sequence are called terms. Say the sequence may be ascending or descending. Ensure that the children understand these terms. • On the OHP calculator use the constant function to display the following sequence of numbers and ask the children to put their hands up as soon as they recognise the rule: 84, 77, 70, 63, 56 etc. **Q** Is this an ascending or descending sequence? What is the rule? Establish that this is a descending sequence because the numbers are decreasing by 7. Agree the rule is subtract 7. Ask the children to describe the next number in the sequence in terms of the last number. Introduce the shorthand NN and LN for the next number and last number. **Q** How could we use the shorthand to describe this sequence? Establish that the next number is the last number take away 7 and that this could be written as: NN = LN – 7. • Using the OHP calculator constant function, display the following sequence of numbers and ask the class to work out the rule; 50, 56, 62, 68, 74, 80. **Q** Is this an ascending or descending sequence? What is the rule? Establish that the sequence is an ascending sequence because the numbers are increasing by 6 each time. Agree the rule is: NN = LN + 6. • Now display a sequence which involves negative numbers, such as: –40, –37, –34. **Q** What is the next number in this sequence? How do you know? Establish that the next number will be –31 and it is an ascending sequence. Demonstrate this on the empty number line emphasising the steps of +3. Continue the sequence from –34 asking: **Q** What is the next number in the sequence? What is the rule? Establish that the rule is NN=LN +3 and with the class generate the sequence to –13. **Q** What will be the first positive number in this sequence?

Plenary

Teaching Activities/ Focus Questions
• Display some of the children's sequences. Invite the rest of the class to describe the rules using shorthand and predict the next three terms in the sequences. Ask children to record their answers on their whiteboards. • Collect and discuss their rules and the next three terms the children identified.

Planning sheet	Day One (page 2 of 2)	Unit 11 *Reasoning about numbers*	Term: *Spring*	Year Group: *5*

Oral and Mental		Main Teaching		Plenary
Objectives and Vocabulary	**Teaching Activities**	**Objectives and Vocabulary**	**Teaching Activities**	**Teaching Activities/ Focus Questions**
	• Now display OHT 11.2. **Q** Which numbers are one away from either a multiple of 6 or 7? Children to record and show the numbers and the multiples on their whiteboards.		Collect answers and agree it is 2. • Give the children the first three terms of a number of sequence. They are to write the rule using the shorthand and extend the sequence by five terms. • Collect answers and discuss the sequences and the rules. Ask children to work in pairs and make up a set of two or three sequences to use in the plenary. They are to list four terms in their sequences and write the rules using NN and LN notation.	**By the end of the lesson, the children should be able to:** • **Recognise and extend number sequences formed by counting on or back from any number;** • **Explain the rules orally and in writing.** (Refer to supplement of examples, section 6, page 17.)

Planning sheet	Day Two	Unit 11 *Reasoning about numbers*	Term: *Spring*	Year Group: *5*

Oral and Mental

Objectives and Vocabulary	Teaching Activities
Recognise multiples of 8 and 9. VOCABULARY multiple RESOURCES OHT 11.3 OHT 11.4 Whiteboards	• Tell the children that today they will be identifying multiples of 8 and 9. Display OHT 11.3. **Q** Which numbers are multiples of 8? Ask the children to write on their whiteboards all the numbers which they recognise as multiples of 8. Collect answers and correct any errors. • Repeat asking: **Q** Which multiples of 9 can you see? Give the children 30 seconds to write on their whiteboards numbers they recognise as multiples of 9. Collect and discuss answers. **Q** Are there any numbers which are multiples of 8 and 9? Establish that 72 is a multiple of 8 and 9. • Point out that the only numbers not multiples of 8 or 9 were 46 and 25. **Q** How far away from a multiple of 9 or 8 are these two numbers? Agree that 46 is 1 less than 45, a multiple of 9, and 25 is 1 more than 24, a multiple of 8. • Display OHT 11.4. **Q** Which numbers are one away from with a multiple of 8 or 9? Collect children's answers using whiteboards.

Main Teaching

Objectives and Vocabulary	Teaching Activities
Recognise and extend number sequences formed by counting on or back from any number in steps of constant size. VOCABULARY consecutive sequence term rule ascending descending constant function RESOURCES OHP calculator Calculators	• Write the following sequence on the board: 58, 67, 76, 85, ?, 103, 112, ? **Q** What are the missing numbers in this sequence? How do you know? Establish that this is an ascending sequence and that the missing numbers are 94 and 121. **Q** What is the rule? Collect answers. Use the shorthand to confirm NN = LN + 9. • Write the following sequence on the board: 227, 219, 211, ?, 195, 187, ? **Q** What are the missing numbers in this descending sequence? What is the rule? Collect answers and confirm NN = LN – 8 Establish that for a simple ascending or descending sequence the difference between any two consecutive terms is the same. Once the rule has been worked out any missing numbers can be found. • Display the following sequence on the board: 722, 632, 542, ?, 362, 272, 182, ?, with the two missing terms. **Q** Is this an ascending or descending sequence? Establish that the sequence is descending. **Q** What is the rule for this sequence and what are the missing terms? Establish that the rule is 'subtract 90' and that this can be written in shorthand as: NN = LN – 90. The missing terms are 452 and 92. • Remind children how to use the constant function on their calculators. Demonstrate this on the OHP calculator. • Tell them that they are now going to use calculators to generate sequences. They must include ascending and descending sequences. They are to record their rule and generate eight terms in the sequence. They are then to omit one number in the middle of their sequence and one at the end and give the sequence to their partner. Their partner must find the missing numbers and the rule using the shorthand which the class is familiar with. They then check the answers with their partner. After one go each, check children understand what to do. Tell them to repeat this making sure they use sequences with negative numbers.

Plenary

Teaching Activities/Focus Questions
• Display the following on the board: 23, ?, ?, ?, 47 Say that a sequence has 5 terms, but only first and the last terms are given: **Q** What are the three missing terms? Collect answers, and discuss children's strategies. **Q** How could we find the missing middle term? Agree it is 35, (23 + 47) ÷ 2, and discuss how this idea can be extended to get the three missing terms 29, 35, 41. Establish the rule is NN = LN + 6. • Repeat using 37, ?, ?, ?, 25. **Q** What if there were four missing terms? Discuss children's suggestions using 19, ?, ?, ?, ?, 39 and 57, ?, ?, ?, ?, 12. HOMEWORK – Give children the following sequences. Ask children to find the missing terms and the rule for each sequence (i) 6, 13, 20, ?, ? ; (ii) –14, –10, –6, ?, ? ; (iii) 14, ?, ?, ?, 38; (iv) 87, ?, ?, ?, 49; (v) –12, ?, ?, 12. **By the end of the lesson, the children should be able to:** • **Recognise and extend number sequences formed by counting on or back from any number;** • **Explain a rule orally and in writing.** (Refer to supplement of examples, section 6, page 17.)

Planning sheet	Day Three	Unit 11 *Reasoning about numbers*	Term: *Spring*	Year Group: *5*

Oral and Mental

Objectives and Vocabulary	Teaching Activities
Double any two-digit number, halve any two-digit number. VOCABULARY double halve partition RESOURCES Resource sheet 11.1a Resource sheet 11.1b Resource sheet 11.1c Resource sheet 11.1d	• Ask the children: **Q** What is double 47? Establish that the answer is 94 and ask for methods. Remind the children that one strategy for doubling two-digit numbers is to partition them and double the tens and units separately. • Tell the class that they are going to practise halving and doubling using follow me cards. If these have not been used before explain that everyone must read out their question which is at the top of the card and whoever has the answer must read it out immediately and then read their question. The aim is to complete the activity as quickly as possible. • Give out the cards. If there are too many, give some children two cards. If there are too few, some children can share. Make sure they are shuffled and not in order. • Time the class. When the loop is complete tell everyone to swap cards with someone near them and do the activity again telling the class that they are aiming to beat their previous time. • If some numbers have presented particular difficulties go over these quickly.

Main Teaching

Objectives and Vocabulary	Teaching Activities
Make and investigate a general statement about familiar numbers by finding examples that satisfy it. Know and apply tests of divisibility by 2, 4, 5, 10 or 100. VOCABULARY divisible divisibility rule multiple factor digit RESOURCES OHT calculator Calculators OHT 11.5 Counters Interactive teaching program (ITP) 'Number grid' or Resource sheet 11.2	• Discuss the homework. Collect answers and correct any errors. • Remind the children what the term divisible means. Say for example that 24 is divisible by 3 because 24 divided by 3 is 8, that 18 is divisible by 9 because 18 divided by 9 is 2. Emphasise that if a number is divisible by another number then that number is a factor of the number, e.g. 24 is divisible by 3 so 3 is a factor of 24, 18 is divisible by 9 so 9 is a factor of 18. • Display the 100 square number grid on OHT 11.5 or use the 'Number grid' interactive teaching program (ITP). **Q** Which numbers are divisible by 10? Cover up multiples of 10 with counters or highlight on the screen and establish that they all have a zero in the units column. **Q** Tell me some numbers bigger than 100 which are divisible by 10. Collect responses and encourage children to use large numbers. Establish that all these numbers have zero in the units digit. Say that any whole number is divisible by 10 if its units digit is zero and that this is a divisibility rule for 10. It can be used to check if a number is divisible by 10 without any calculation. **Q** What numbers are divisible by 100? Write up some of the children's examples e.g. 300, 2100, 45000. Establish that the last two digits must be zero Say that this is the divisibility rule for 100. • Refer to the ITP or the OHT and ask the class to count in twos from 0. As they do so highlight on screen or cover on OHT grid with counters. **Q** What do all these multiples of two end in? Establish that all multiples of two, i.e. numbers which are divisible by two, end in 0, 2, 4, 6 or 8. Say that this is a divisibility rule for 2. **Q** Is 374 divisible by 2? How do you know? Establish that because it ends in 4 it is divisible by 2 and we know this without having to do the division sum. On the OHP calculator confirm that the answer is a whole number. • Say that we now have three rules for divisibility and write these on the board: A number is divisible by 10 if the last digit is 0. A number is divisible by 100 if the last two digits are 00. A number is divisible by 2 if the last digit is 0, 2, 4, 6 or 8. • Tell the children that they are to find a divisibility rule for 4 and 5. They are to work in pairs and write their rules in the same way as the other three rules, then test them with larger numbers. Give children calculators and Resource sheet 11.2 or access to the ITP.

Plenary

Teaching Activities/ Focus Questions
• Discuss the children's results. **Q** When is a number divisible by 5? Establish that a number is divisible by 5 the last digit is 0 or 5. **Q** When is a number divisible by 4? Discuss responses and establish that a number is divisible by 4 if the last two digits are divisible by 4. • Write a selection of numbers such as the following in a table.

Number	Divisible by
265	
4000	
1890	
3924	
6049	
132	
17675	
520	

For each number ask:

Q Is this divisible by 2?.. by 4?.. by 5? .. by 10?.. by 100? How do you know?

By the end of the lesson, the children should be able to:

- **Know and apply tests of divisibly by 2, 4, 5, 10 or 100;**
- **Make and investigate a general statement about familiar numbers by finding examples that satisfy it.**

(Refer to supplement of examples, section 6, Pages 19 and 81.)

Planning sheet	Day Four	Unit 11 *Reasoning about numbers*	Term: *Spring*	Year Group: *5*

Oral and Mental

Objectives and Vocabulary	Teaching Activities
Use doubling to multiply two-digit numbers and simple three-digit numbers by 4. VOCABULARY double partition RESOURCES Whiteboards	• On the board write 32. Ask children: **Q** What is double 32? Collect answers and record on the board: 32 x 2 = 64 **Q** What is double 64? Collect and record: 64 x 2 = 128 and 32 x □ = 128 **Q** What is the missing number? Why? Establish it is 4 as this is equivalent to double and double again or 2 x 2. • Repeat with other starting numbers. Emphasise that the operation: 'double and double again'; and 'multiply by 4' are equivalent. • Set a range of questions involving doubling and multiplying by 4 e.g. double 59, 28 x 4. Collect answers on whiteboards. • Extend to using three-digit numbers.

Main Teaching

Objectives and Vocabulary	Teaching Activities
Make and investigate a general statement about numbers by finding examples that satisfy it. VOCABULARY multiple double halve quadruple triple quarter third RESOURCES Resource sheet 11.3 Resource sheet 11.4 Large sheet of paper	• Give out Resource Sheet 11.3. **Q** What do you notice about the numbers in the 2 and 4 times tables? Establish that the answers in the 4 times table are double those in the 2 times table. Remind children they were using this relationship in the oral and mental starter. Emphasise that if children know their 2 times tables, they should know their 4 times table. They should be able to work out and check multiplication facts such as 4 x 7 saying 2 x 7 =14 so 4 x 7 = 2 x 14 = 28. • Remind children that as 4 x 7 = 28 we say that 28 is a multiple of 4 and 7. • Explain that you want to record the relationship between the 4 and 2 times tables as general statements. On the board write: _____ the 2 times table gives the 4 times table. _____ the 4 times table gives the 2 times table. _____ a multiple of 2 gives a multiple of _____ _____ a multiple of 4 gives a multiple of _____ Ensure children understand how the words double and halve are used and that they can provide examples to satisfy each statement. • Ask the children to look at the 8 times table on Resource sheet 11.3. **Q** Can you find other relationships between the 8, the 4 and the 2 times tables? Ask children to work in pairs and identify relationships. Say they are to write general statements about their relationships in the form: _____ the □ times table gives the □ times table. _____ a multiple of □ gives a multiple of □. • Collect suggestions and record the key statements on the board that identify the relationships between the 8 and 4 times tables and the 8 and 2 times tables. Introduce the term quadruple for four times. Ensure children can identify and understand that: Quarter the 8 times table gives the 2 times table; Quadruple a multiple of 2 gives a multiple of 8. Ask children to provide examples. • Give children copies of Resource sheet and 11.4. Explain that working in pairs they are to identify as many relationships as they can between the six sets of times tables on the sheet. They are to write statements similar to those they wrote for the 8, 4 and 2 times table, and provide examples that satisfy their general statements.

Plenary

Teaching Activities/Focus Questions

• Discuss children's findings and ask for statements. Write examples of their statements on a large sheet of paper they can all see. For example:

Double the 3 times table gives the 6 times table.

Triple the 3 times tables gives the 9 times table.

Third a multiple of 9 gives a multiple of 3.

Fifth a multiple of 10 gives a multiple of 2.

Point to a statement and ask:

Q Can you give me an example that satisfies this statement?

Collect answers and correct any errors. Record examples with the statements and display in the classroom.

By the end of the lesson the children should be able to:

- **Understand the term 'general statement';**
- **Make a general statement about familiar numbers;**
- **Express a relationship orally and in writing.**

(Refer to supplement of examples, section 6, pages 17, 19 and 81.)

Planning sheet	Day Five (page 1 of 2)	Unit 11 *Reasoning about numbers*	Term: *Spring*	Year Group: *5*

Oral and Mental

Objectives and Vocabulary	Teaching Activities
Know and apply tests of divisibility by 2, 4, 5, 10 or 100. VOCABULARY multiple divisible factor	• Remind the children that earlier in the week they were learning about tests of divisibility for 2, 4, 5, 10 and 100. Ask the children to complete the statements: A number is divisible by 10 if…. (the last digit is 0); A number is divisible by 100 if…. (the last two digits are 00); A number is divisible by 2 if…. (the last digits are 0, 2, 4, 6 or 8); A number is divisible by 4 if…. (the last two digits are divisible by 4); A number is divisible by 5 if…. (the last digit is 0 or 5). • Tell the children that they are going to practise applying these rules quickly. You will ask them questions to which they have to show Yes or No using thumbs up or thumbs down. Ask children questions involving two- and three-digit numbers. **Q** Is…divisible by…? or is…a multiple of…? or is…a factor of…? Collect responses and discuss methods.

Main Teaching

Objectives and Vocabulary	Teaching Activities
Recognise and extend number sequences. Suggest extensions by asking 'What if?'. VOCABULARY sequence square number area rule	• On the board write: 1, 2, 3. **Q** What is the next term in my sequence? Collect answers without comment and continue the sequence; 1, 2, 3, 5, 8. Ask again: **Q** What is the next term in my sequence? Agree it is 13. **Q** What is my rule? Establish that the next term is found by adding the last two terms, so that 5 + 8 = 13, 8 + 13 = 21 etc. Ask children to continue the sequence. Collect and discuss answers. • Explain that this sequence is different from the earlier sequences where the children were always adding or subtracting the same amount. On the board write: 1, 3, ?, ?, 11. Say that this is another sequence where the last two terms are summed to get the next term. **Q** Can you find the two missing terms? Collect answers and agree the sequence is: 1, 3, 4, 7, 11, 18, … • On the board write: 2, ?, ?, 10. **Q** Can you find the two missing terms? Collect suggestions. Agree the sequence is 2, 4, 6, 10, 16, … **Q** How did you find the two missing terms? Establish that the two terms must sum to 10 and the third term is 2 plus the second term. Give children other sequences to complete such as 3, ?, ?, 11; 3, ?, ?, 9; 4, ?, ?, 14; 10, ?, ?, 50. • Collect answers and record on the board as below:

T1	T2	T3	T4	T5	T6	T7
3	4	7	11			
3	3	6	9			
4	5	9	14			
10	20	30	50			

Plenary

Teaching Activities/Focus Questions
• Collect the children's answers and observations. Use these to get children to recognise that: Even when T2 is smaller than T1, the terms after T2 increase in size; When T1 = T2 the terms are all multiples of T1; If T1 = T3, then T2 = 0; If T1 = T4 then T2 = 0 and T3 = T4.

Planning sheet	Day Five (page 2 of 2)	Unit 11 *Reasoning about numbers*	Term: *Spring*	Year Group: *5*

Oral and Mental

Objectives and Vocabulary	Teaching Activities
	Correct any misconceptions. Introduce questions such as: **Q** How do you decide if 420 is divisible by 20? **Q** Which of these numbers 230, 240, 250 is divisible by 40? • Extend to four- and five-digit numbers.

Main Teaching

Objectives and Vocabulary	Teaching Activities
	Explain that T1 means term 1 etc. With the children extend the sequence to T7. • Point out that in the first two sequences T1 is odd and T4 and T7 are also odd. **Q** Why should T4 be an odd number? With the children work through the patterns formed by adding odd and even numbers. Extend to justify why T7 is odd. Repeat with the second two sequences to show why T4 and T7 must be even. • Explain to the children that they are to work in pairs. They are to make up six of their own sequences that use the rule of adding two terms to get the next term. Each sequence is to have six terms, T1 to T6 . They are to swap their sequences with another pair of children, but give only two terms per sequence. Draw the table below to show what information they are to swap. T1 T2 T3 T4 T5 T6 ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ Say that for the first two sequences they give T1 and T3 for the second two sequences T1 and T4 and for the last two sequences T1 and T5. The challenge for the partner pair is to complete the sequences and find T6. • Collect examples from children and discuss the strategies they used. Identify those sequences that were hard to find and why it was hard. • Ask questions about the sequences such as: **Q** What if T2 is odd; can you predict another term that must be odd? **Q** What if T2 is smaller than T1? **Q** What if T1 and T2 are the same; what pattern do you get? **Q** What if T1 and T2 are both multiples of 10? What can you say about the other terms? **Q** What if T1 and T3 are equal? **Q** What if T1 = T4? Ask children to answer some of these questions.

Plenary

Teaching Activities/ Focus Questions
By the end of the lesson the children should be able to: • **Recognise and extend number sequences.** (Refer to supplement of examples, section 6, pages 16 to 21.)

48	**18**	**36**	**35**
24	**56**	**28**	**30**
49	**63**	**41**	**54**
14	**37**	**21**	**42**

18	**52**	**24**	**46**
48	**32**	**56**	**40**
36	**63**	**80**	**26**
64	**90**	**16**	**72**

18	**54**	**24**	**46**
48	**32**	**56**	**40**
36	**63**	**80**	**25**
64	**90**	**16**	**72**

49	**15**	**20**	**82**
39	**28**	**62**	**46**
33	**71**	**89**	**65**
55	**17**	**79**	**35**

Follow Me Cards

I am 49 You are double 39	I am 78 You are double 42	I am 84 You are double 26
I am 52 You are double 19	I am 38 You are double 38	I am 76 You are double 28
I am 56 You are half of 94	I am 47 You are half of 84	I am 42 You are half of 68

Follow Me Cards

I am 34 You are double 29	I am 58 You are double 48	I am 96 You are double 36
I am 72 You are half of 24	I am 12 You are half of 36	I am 18 You are half of 56
I am 28 You are half of 40	I am 20 You are half of 60	I am 30 You are half of 72

Follow Me Cards

I am 36 You are double 33	I am 66 You are double 41	I am 82 You are double 27
I am 54 You are half of 96	I am 48 You are half of 90	I am 45 You are half of 64
I am 32 You are double 47	I am 94 You are double 46	I am 92 You are double 49

Follow Me Cards

I am 98 You are half of 86	I am 43 You are half of 62	I am 31 You are half of 54
I am 27 You are half of 78	I am 39 You are half of 58	I am 29 You are half of 52
I am 26 You are double 34	I am 68 You are double 37	I am 74 You are half of 98

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	90	100

Two times table	Four times table	Eight times table
1 x 2 = 2	1 x 4 = 4	1 x 8 = 8
2 x 2 = 4	2 x 4 = 8	2 x 8 = 16
3 x 2 = 6	3 x 4 = 12	3 x 8 = 24
4 x 2 = 8	4 x 4 = 16	4 x 8 = 32
5 x 2 = 10	5 x 4 = 20	5 x 8 = 40
6 x 2 = 12	6 x 4 = 24	6 x 8 = 48
7 x 2 = 14	7 x 4 = 28	7 x 8 = 56
8 x 2 = 16	8 x 4 = 32	8 x 8 = 64
9 x 2 = 18	9 x 4 = 36	9 x 8 = 72
10 x 2 = 20	10 x 4 = 40	10 x 8 = 80

Two times table	Three times table	Five times table	Six times table	Nine times table	Ten times table
1 x 2 = 2	1 x 3 = 3	1 x 5 = 5	1 x 6 = 6	1 x 9 = 9	1 x 10 = 10
2 x 2 = 4	2 x 3 = 6	2 x 5 = 10	2 x 6 = 12	2 x 9 = 18	2 x 10 = 20
3 x 2 = 6	3 x 3 = 9	3 x 5 = 15	3 x 6 = 18	3 x 9 = 27	3 x 10 = 30
4 x 2 = 8	4 x 3 = 12	4 x 5 = 20	4 x 6 = 24	4 x 9 = 36	4 x 10 = 40
5 x 2 = 10	5 x 3 = 15	5 x 5 = 25	5 x 6 = 30	5 x 9 = 45	5 x 10 = 50
6 x 2 = 12	6 x 3 = 18	6 x 5 = 30	6 x 6 = 36	6 x 9 = 54	6 x 10 = 60
7 x 2 = 14	7 x 3 = 21	7 x 5 = 35	7 x 6 = 42	7 x 9 = 63	7 x 10 = 70
8 x 2 = 16	8 x 3 = 24	8 x 5 = 40	8 x 6 = 48	8 x 9 = 72	8 x 10 = 80
9 x 2 = 18	9 x 3 = 27	9 x 5 = 45	9 x 6 = 54	9 x 9 = 81	9 x 10 = 90
10 x 2 = 20	10 x 3 = 30	10 x 5 = 50	10 x 6 = 60	10 x 9 = 90	10 x 10 = 100