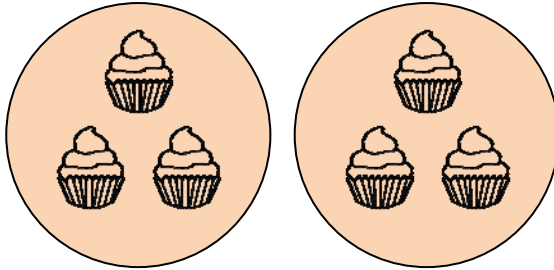


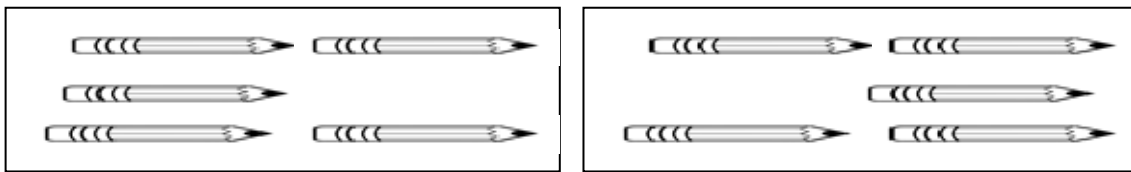
# Odd and even numbers – find out more

Name \_\_\_\_\_ Date \_\_\_\_\_

- 👁️ **Even numbers** are whole numbers that you can **evenly share** between two groups. Another word for share is **divide**.



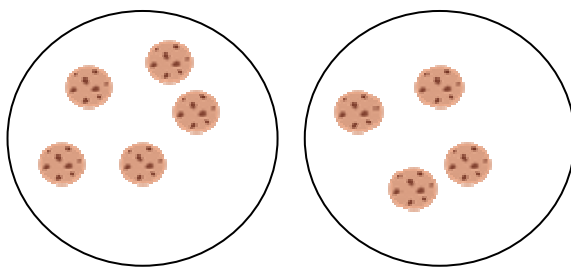
You can share 6 cupcakes evenly between two plates.  
**6 is an even number.**



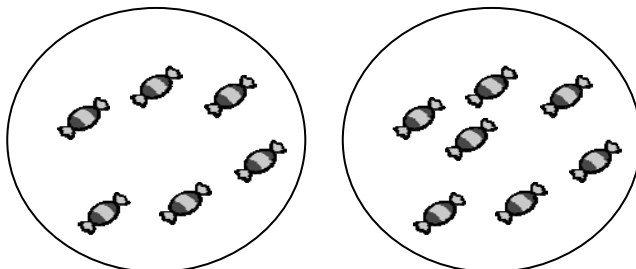
You can divide 10 pencils evenly between two pencil cases. **10 is an even number.**

👁️ **The last digit of an even number is always 0 2 4 6 or 8**

- 👁️ **Odd numbers** are whole numbers that you **cannot** evenly share between two groups. Whole numbers are either odd or even.



You cannot divide 9 biscuits evenly between two plates.  
**9 is an odd number.**




You cannot share 13 whole sweets evenly between two children.  
**13 is an odd number.**

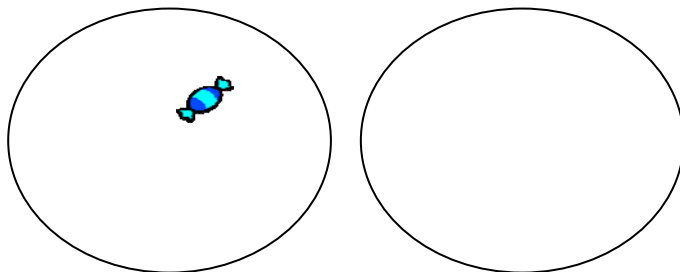
👁️ **The last digit of an odd number is always 1 3 5 7 or 9**

# Odd and even numbers – find out more

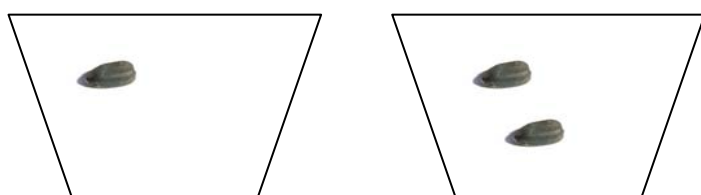
Name \_\_\_\_\_ Date \_\_\_\_\_

## Check you understand even numbers

 Finish the pictures.



You **can** share 8 sweets evenly between two children.




You **can** divide 14 seeds evenly between two flowerpots.

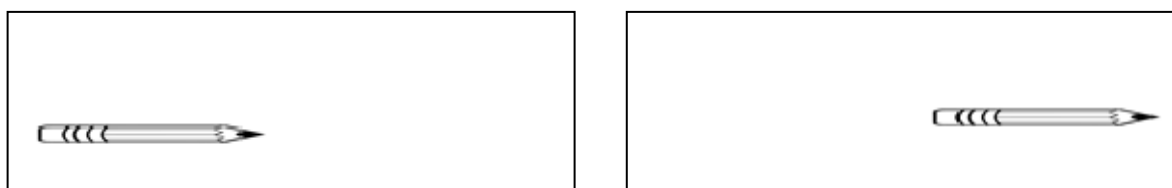
 Circle all the even numbers.

13 14 6 7 30 32 28 14 4 1 45 29

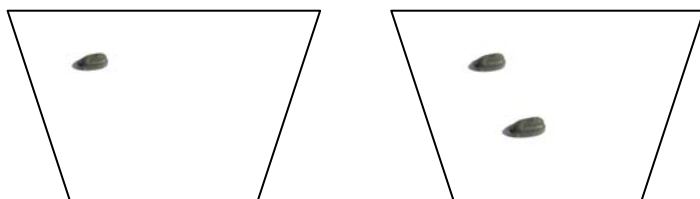
---

## Check you understand odd numbers

 Finish the pictures.



You **cannot** share 7 pencils evenly between two pencil cases.



You **cannot** split 11 seeds evenly between two flowerpots.

 Circle all the odd numbers.

3 4 16 7 50 43 12 17 9 11 25 28

# Odd and even numbers – real life problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_



## Activity holiday

1. Pasha books a chalet at Active Parks.

Here are the chalet numbers in Woodside Way.

12 13 14 15 16 17 18 19 20 21 22

**How many chalets have even numbers?** \_\_\_\_\_

(3)

- ❖2. Margo stays at the Active Parks hotel.

Margo wants a room with a shower and a forest view.

Rooms with even numbers have a park view.

All the other rooms have a forest view.

32 shower	33 bath
34 bath	35 bath
36 bath	37 shower
38 shower	39 bath
40 shower	41 shower

**Tick all the rooms that Margo can book.**

(3)

3. Pasha joins the 'Heroes' team at Active Parks.

Team members wear shirts with odd numbers.

**Circle all the odd numbers below.**

12 13 14 15 16 17 18 19 20 21 22

(2)

# Odd and even numbers – real life problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

## Delivery services



- ❖1. Violet is a courier. She delivers a parcel to a house in River Road.

Some house numbers are missing from her map.

Write in the missing numbers.

(3)

131	
135	134
137	136
139	138

**River Road**

- ❖2. Violet has a parcel for 60 Seabrook Street.

She finds a parking space outside 46 Seabrook Street.

The house numbers go up in even numbers on this side of the street.

Complete the numbers until you get to number 60.

46 48 \_\_\_\_\_

(3)

3. After work, Violet goes to the cinema. She wants a deluxe seat.

All the seats with odd numbers between 49 and 199 are deluxe seats.

These are all the available seats:


13 14 55 37 56 219 191 70 77 133

How many seats are suitable for Violet? \_\_\_\_\_

(3)

# Number patterns – find out more

Name \_\_\_\_\_ Date \_\_\_\_\_


 These numbers are arranged in a pattern.

4 4 4 7 7 4 4 4 7 7 4 4 4


The pattern repeats like this: three 4s, two 7s, three 4s, two 7s, three 4s, and so on.

---

## Number patterns – check you understand

 Describe how this pattern repeats: 8 8 8 6 8 8 8 6 8 8 8 6


---

 Write the next two numbers for each pattern.

4 4 7 7 4 4 7 7 4 4    \_\_\_    \_\_\_

2 2 3 2 2 3 2 2 3 2    \_\_\_    \_\_\_

5 1 6 6 5 1 6 6 5 1 6    \_\_\_    \_\_\_

 Write the next three numbers for each pattern.

0 0 7 7 8 0 0 7 7 8 0 0 7    \_\_\_    \_\_\_    \_\_\_

9 7 5 9 7 5 9 7 5 9 7 5 9    \_\_\_    \_\_\_    \_\_\_

 Write the missing numbers.

2 2    \_\_\_    9 2 2 2 9 2 2 2 9    \_\_\_

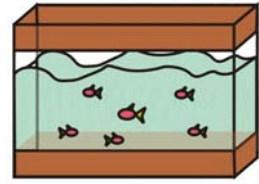
0 0 7 2 2    \_\_\_    0 7 2 2 0 0 7 2 2    \_\_\_

# Number patterns – real life problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

## Pet shop



1. Sofia works in pet shop that opens 7 days a week.

Her working days follow a pattern. She works 4 days, has 1 day off, then works another 4 days, has 1 day off, and so on.

MARCH						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
	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			

Thursday 3<sup>rd</sup> March is her first day off in March.

How many days off does Sofia have in March? \_\_\_\_\_ (3)

2. Sofia feeds the tropical fish with food tablets. She uses this plan.

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed
Number of tablets	2	3	3	2	3	3	2	3		

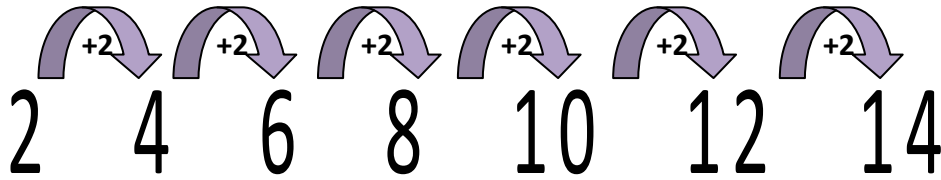
Complete the table. (2)

How many tablets does Sofia use in 10 days? \_\_\_\_\_ (2)

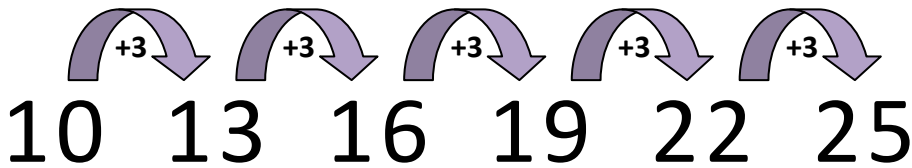
# Number sequences – find out more

Name \_\_\_\_\_ Date \_\_\_\_\_

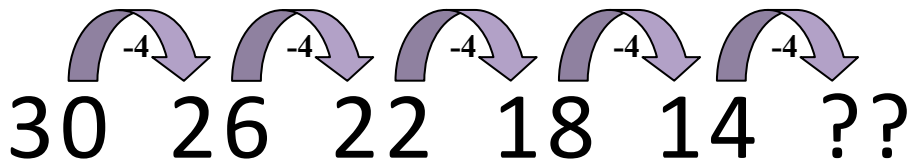
- 👁 Here is a list of even numbers. This is called a number sequence.  
Numbers in a sequence always follow a rule. The rule for this sequence is **add on two**.



- 👁 Here is a different number sequence. The rule is **add on three**.




- 👁 Here is a sequence where the numbers get smaller. The rule is **take away four**.  
Can you work out the next number in the sequence?



---

## Number sequences – check you understand

 Write the rule for each sequence. Then write the next 3 numbers for each sequence.

11 12 13 14 15 16 17    \_\_\_    \_\_\_    \_\_\_

---

22 20 18 16 14 12 10    \_\_\_    \_\_\_    \_\_\_

---

25 30 35 40 45 50 55    \_\_\_    \_\_\_    \_\_\_

---

# Number sequences – real life problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

## Village fete



1. Entrance tickets to the village fete cost £1. Every ticket has a number.  
Tickets with a lucky number win a prize. The lucky numbers follow this pattern.

9 19 29 39 49

**Write the rule for working out the next number.**

\_\_\_\_\_ (1)

What are the next two lucky numbers? \_\_\_\_\_ (1)

2. 200 raffle tickets are used for the tombola game. The numbers go from 1 to 200.  
If you pull out a number ending in a zero you win a prize.

**How many tombola prizes are there?** \_\_\_\_\_ (1)

**Show your working out.** \_\_\_\_\_ (2)

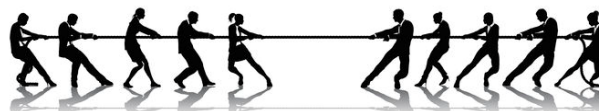
- ❖3. 36 people want to play Tug of War. Each person is given a number from 1 to 36.  
The people are split into 4 teams using a number pattern.

Team	Number pattern
A	1, 5, 9, 13,
B	2, 6, 10, 14,
C	3, 7, 11, 15,
D	4, 8, 12, 16,

**Write the numbers from 17 to 36 in the table using the same pattern.** (3)

**What team will person number 31 be in?** \_\_\_\_\_ (1)

**How many people are in each team?** \_\_\_\_\_ (1)





# Number sequences – real life problems

For full marks, you must show how you get your answer.



Name \_\_\_\_\_ Date \_\_\_\_\_

## Cinema

1. Simon works at the cinema shop. Pasha buys popcorn for £1. 65.  
Simon gives Pasha change from a £2 coin. He gives the change using only 5p coins.

**Show how Simon counts up in 5s from £1.65 to £2.**

£1.65, £1.70, \_\_\_\_\_ £2.00 (2)

**How many 5p coins does Simon give to Pasha?** \_\_\_\_\_ (1)

- ❖2. In Screen D the number of seats in each row follows a pattern.

Row	1	2	3	4	5	6
Number of seats	7	11	15			

**Write the rule for the pattern:** \_\_\_\_\_ (1)

**Complete the table above for rows 4 to 6. (2) Show your working out below. (1)**

- ❖3. Simon checks the money in the shop till at regular intervals.

These are the times when he checks.

**Write the rule for the pattern**

\_\_\_\_\_ (1)

**Fill in the missing times. (2) Show your working out below. (2)**

# Number sequences – real life problems






For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

## Graham's garden

- ❖1. Graham plants some red pepper seeds.

The calendar show when he waters them. He follows a pattern.

May						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
	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			

How often does Graham water the peppers? \_\_\_\_\_ (1)

How many more days will he water them in May? \_\_\_\_\_ (2)

2. Graham fills the bird feeders in his garden every 8 days.

In May he fills them on the 3<sup>rd</sup>, 11<sup>th</sup> and 19<sup>th</sup>.

What is the next date that he fills them? (1)

Show your working out. (1)

3. Graham is saving for a new greenhouse. The greenhouse costs £429.

Graham saves the same amount each month. Complete the table below. (1)

Month	Jan	Feb	Mar	Apr	May	June
Total Saved £	40	80	120			

Will Graham have enough money by October? \_\_\_\_\_ (1)

Draw a table to show how you worked out your answer. (1)

# Number sequences – real life problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

## Fitness watch



1. John has a new fitness watch for his 70<sup>th</sup> birthday. It measures his heart rate. He wants to achieve the maximum heart rate suggested for his age. He sees this table on the internet.

Age	20	30	40	50	60	70	80
Maximum heart rate (beats per minute)	200	190	180	170			

Write the rule for the pattern: \_\_\_\_\_ (1)

Complete the table for ages 60 to 80. \_\_\_\_\_ (1)

What heart rate should John be aiming for? \_\_\_\_\_ bpm. (1)

2. John 's fitness watch also measures the number of step he takes each day. He wants to increase his steps until he achieves 8000 a day. He makes a plan.

Week	1	2	3	4	5				
Steps per day	5000	5500	6000	6500					

Complete the plan above until John's target number of steps is reached. (3)

In what week will John achieve his target? \_\_\_\_\_ (1)

3. The gym coffee shop has a loyalty card. John has one coffee every time he visits the gym. In January, he gets a new loyalty card and visits the gym 24 times.

How many free coffees does John get in January?



Buy 6 cups  
get your 7<sup>th</sup> one free!

(2)

# Check your knowledge – mixed problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Fishing for ducks is a popular game at the village fair.  
If you catch a duck, you win a prize. Each duck has a number.  
Odd numbers win a toy. Even numbers win sweets.



Write the correct prize underneath each number in the table.

(2)

<b>Number of duck</b>	6	17	15	12	21
<b>Prize (toy or sweets)</b>					

- ❖2. Nicoleta gets new tablets from the doctor. She must take the tablets for ten days.  
The doctor gives her this plan.

<b>Day</b>	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>	<b>Thu</b>	<b>Fri</b>	<b>Sat</b>	<b>Sun</b>	<b>Mon</b>	<b>Tue</b>	<b>Wed</b>
<b>Number of tablets</b>	3	1	2	3	1	2	3	1		

Complete the plan.

(1)

How many tablets does Nicoleta take altogether?

\_\_\_\_\_

(1)

Show your working out below.

(2)

- ❖3. Mary works at the post office. A customer buys a larger letter stamp for 76p.  
Mary gives him change from a £1 coin. She gives the change using only 2p coins.

Show how Mary counts up in 2s from £0.76 to £1.

£0.76, £0.78, \_\_\_\_\_ £1.00

(2)

How many 2p coins does Mary give the customer? \_\_\_\_\_

(1)

# Check your knowledge – mixed problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

- ❖4. Stan selects and packs online orders in a building supplies warehouse. The warehouse is organised into sections and shelves.

Odd numbered shelves only		Even numbered shelves only	
Section A	Shelves 1 to 7	Section D	Shelves 2 to 8
Section B	Shelves 9 to 19	Section E	Shelves 10 to 20
Section C	Shelves 21 to 27	Section F	Shelves 22 to 28

S

Stan lists some popular products and their shelf numbers. **Complete the list.** (3)

Item	Shelf Number	Section
Wood screws	23	C
Bolts	12	_____
Washers	6	_____
Hinges	11	_____

- ❖5. Billy is a drummer in a band. He uses this beat pattern.

2, 2, 2, 4, 4, 2, 2, 2, 4, 4, 2, 2, 2, 4,

What are the **next two** beats in the pattern? \_\_\_\_\_ (2)

6. Mary's catches the bus to work. The bus times follow this pattern.

**Bus leaves at:**

- 6 minutes past the hour
- 18 minutes past the hour
- 30 minutes past the hour
- \_\_\_\_\_ minutes past the hour
- \_\_\_\_\_ minutes past the hour

**Write the rule for the pattern:** \_\_\_\_\_ (1)

**Fill in the missing bus times.** (2)

# Check your knowledge – mixed problems

For full marks, you must show how you get your answer.

Name \_\_\_\_\_ Date \_\_\_\_\_

7. Lucas is a nurse. He takes a patient's temperature at regular intervals.

These are the times when he checks.

12:45	13:00	13:15		
-------	-------	-------	--	--

Write the rule for the pattern.

\_\_\_\_\_ (1)

Fill in the missing times.

(1)

8. Lucas is buying mini cheeses for his children's lunch boxes. He needs **15** cheeses.

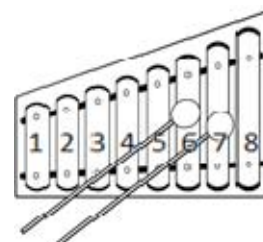
The supermarket has a special offer.

Buy 4 mini cheeses get the 5<sup>th</sup> one free.

How many free cheeses will Lucas get? \_\_\_\_\_

(2)

9. Millie plays the xylophone. She uses the numbers on the xylophone keys to help her play this repeating tune.



1 2 3 4 2 3 4 5 3 1 2 3 4 2 3 4 5 3 1 2 3 4 2 3 4 5 3

How many times does she repeat the tune? \_\_\_\_\_

(1)

Millie learns this new tune:

8 7 8 7 6 5 4 8 7 8 7 6 5 4 8 7 8 \_\_\_\_\_

(1)

Complete the pattern so she plays 21 beats altogether.

Pages 15-26 of this document are only available to site contributors. Pages include: detailed mark sheets with answers and suggested pass marks for assessment purposes – all mapped to the Functional Skills Mathematics 'coverage & range' and 'process skills' 3 extra pages of 'Check you understand' worksheets; teaching ideas and background information.  
**Please use the site contact box or email Maggie for a copy.**