NATIONAL QUALIFICATIONS CURRICULUM SUPPORT

Mathematics

Using Mathematics in Everyday Situations 2

[ACCESS 2]



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SECTION 1

Outcome 1



Student Worksheet: Digital to Analogue Time



Write these digital times in words. The first one is done for you.

Hours and Half Hours

Digital Time	Time in Words Analogue
--------------	------------------------

07:00	Seven o'clock
08:30	Half past eight
01:00	
12:30	
10:30	
03:00	
06:30	



Student Worksheet: The 24 Hour Clock a.m. or p.m.

a.m. is the time **after midnight** and before **12 noon**. **p.m.** is the time after **12 noon** and before **midnight**.

Write in the space whether these times are a.m. or p.m.

1.	Your alarm rings for school	
2.	Eat supper.	
3.	Have bath before bed.	
4.	Get out of bed.	
5.	Meet friends after school.	
6.	Put on pyjamas or nightdress.	
7.	Dress for school.	
8.	Eat lunch at school.	
9.	Go to late night disco.	
10.	Travel to school.	
11.	Do homework.	
12.	Wash dinner dishes.	
13.	Turn out lights to go to sleep.	

Student Worksheet: The 24 Hour Clock a.m. or p.m.

a.m. is the time after midnight and before 12 noon.p.m. is the time after 12 noon and before midnight.

Write in the space whether these times are a.m. or p.m.

1.	We have afternoon tea at 4.30	<u>.m.</u>
2.	We have breakfast at 8.00	<u>.m.</u>
3.	Children go to bed at 8.00	m.
4.	We go to the pictures at 6.30	.m.
5.	We have lunch at 12.40	<u>.m.</u>
6.	School begins at 9.25	<u>.m.</u>
7.	The late night news is at 11.00	m.
8.	School ends at 3.00	<u>.m.</u>
9.	We have supper at 7.00	.m.
10.	Morning break ends at 11.15	m.

Student Worksheet: The 24 Hour Clock

Look at these items. They are all in the **morning (a.m.)**. Write them as you would the **24 hour clock**.

Remember to use 4 numbers. The first is done for you.

1.	5 past 7	07:05
2.	20 past 9	:
3.	Half past 6	:
4.	2 o'clock	:
5.	25 past 9	:
6.	10 to 10	:
7.	25 past 6	:
8.	11 o'clock	:
9.	Quarter past 2	:
10.	Quarter to 3	:
11.	10 past 10	:
12.	20 to 10	:

Student Worksheet: The 24 Hour Clock

Look at these times. They are all in the **afternoon (p.m.)**. Write them as you would the **24 hour clock**.

Remember to use 4 numbers. The first is done for you.

1.	Half past 1	13:30
2.	20 to 3	:
3.	Quarter past 8	:
4.	5 to 11	:
5.	25 past 12	:
6.	10 to 2	:
7.	20 to 6	:
8.	Quarter to 5	:
9.	20 past 2	:
10.	5 past 7	:
11.	10 past 4	:
12.	1 o'clock	:

Student Worksheet: Analogue to 24 Hour Clock

Look carefully at these analogue clocks. Above each clock you see a.m. or p.m. This is very important when converting time to the 24 hour clock. Write in the time below each clock. The first one is done for you.

Note: If the time is p.m. you must remember to add 12 on to the hours.



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Student Worksheet: The Passage of Time

How many hours from:

04:00 to 06:00	hours
03:00 to 04:00	hours
02:00 to 10:00	hours
01:00 to 12:00	hours
05:00 to 08:00	hours
04:00 to 11:00	hours
05:00 to 12:00	hours
08:00 to 10:00	hours

How many minutes from:

03:00 to 03:20	minutes
01:00 to 01:45	minutes
02:00 to 02:50	minutes
07:00 to 07:05	minutes
08:00 to 08:25	minutes
11:00 to 11:10	minutes
05:00 to 05:30	minutes
08:00 to 08:55	minutes

How many hours and minutes from:

03:00 to 06:15	hours	minutes
07:00 to 08:40	hours	minutes
02:00 to 05:55	hours	minutes
01:00 to 10:20	hours	minutes
05:00 to 08:45	hours	minutes
04:00 to 11:30	hours	minutes
09:00 to 12:05	hours	minutes
08:00 to 10:10	hours	minutes
02:00 to 10:50	hours	minutes

Student Worksheet: Timetables

Bus Timetable

Here is part of the bus timetable from Motherwell to Glasgow. Look carefully at the timetable, then answer the questions below.

	1	2	3	4
Depart Motherwell	09:00	10:00	11:00	12:00
Arrive Glasgow	09:30	10:30	11:30	12:30

1.	What time does Bus 3 leave Motherwell?	
2.	What time does Bus 3 arrive in Glasgow?	
3.	How long does the journey take?	
4.	Does every bus take the same time to make	
	this journey?	
5.	If you just miss a bus in Motherwell, how long	
	do you have to wait for the next bus?	
6.	You must be in Glasgow at 11:15 to meet your	
	friend. Which bus must you take $-1, 2, 3$, or	
	4?	

Student Worksheet: Timetables

Bus Timetable 2

Here is part of the bus timetable from Bellshill to Motherwell. Look carefully at the timetable, then answer the questions below.

	1	2	3	4	5
Depart Bellshill	09:00	09:15	09:30	09:45	10:00
Arrive Motherwell	09:30	09:45	10:00	10:30	10:30

1.	What time does Bus 1 leave Bellshill?	
2.	What time does Bus 1 arrive in Motherwell?	
3.	How long does the journey take?	
4.	Does every bus take the same time to make	
	this journey?	
5.	If you just miss a bus in Bellshill, how long do	
	you have to wait for the next bus?	
6.	How many buses leave in one hour?	

Student Worksheet: Passage of Time

The students at Eatwell School are preparing a meal for some hungry friends. They have a list of all the food that requires cooking and the length of time the foods take. They want all the food to be ready at the same time so they have to work out what time to begin cooking each food.

They make up a table to help them. Fill in this table now, telling the students what time they should begin to cook each dish.

Food	Begin	Cooking Time	Meal Time
	Cooking		
Soup		2 hours	4.30 p.m.
Potatoes		30 minutes	4.30 p.m.
Carrots		25 minutes	4.30 p.m.
Cauliflower		20 minutes	4.30 p.m.
Roast Beef		2 hours 30 min.	4.30 p.m.
Custard		15 minutes	4.30 p.m.
Eve's Pudding		2 hours	4.30 p.m.

Their friends want to arrive half an hour before dinner and their journey takes one hour. When should they leave in order to be there in time?

If they leave for home at 8.00 p.m., what time will they get home?

Student Worksheet: The Passage of Time – Problems

Here are the start and finish times of some films. Some of the start and finish times have been missed out of the table.

Work out how long the film lasts from the information you are given and then fill out the rest of the table.

Toy Story							
Begins	Ends	Begins	Ends	Begins	Ends		
12 noon	1.15 p.m.	2.00 p.m.	3.15 p.m.	4.00 p.m.			
Inspector Gadget							
Begins	Ends	Begins	Ends	Begins	Ends		
12 noon	2.00 p.m.		6.00 p.m.	8.00 p.m.			
Muppets in Space							
Begins	Ends	Begins	Ends	Begins	Ends		
1.00 p.m.	2.30 p.m.	4.00 p.m.	5.30 p.m.		7.30 p.m.		

Here are the times taken to complete the journeys from Glasgow to different parts of the UK.

Glasgow to London	6 hours
Glasgow to Inverness	3 hours 30 minutes
Glasgow to Manchester	4 hours 30 minutes
Glasgow to Aberdeen	3 hours 15 minutes

- 1. The train leaves Glasgow at 9.00 a.m. What time does it arrive in London?
- 2. The train leaves Glasgow at 12 noon. What time does it arrive in Inverness?

OUTCOME 1

3.	The train leaves Glasgow at 3.00 p.m.	
	What time does it arrive in Manchester?	

4. The train leaves Glasgow at 7.00 a.m. What time does it arrive in Aberdeen?

Jill decides to get fit. Here are her work-out times for this week.

How long does she work-out each day?

Days and Times	Length of Work-out
Mon. 1.00 p.m. to 2.30 p.m.	
Wed. 4.00 p.m. to 5.15 p.m.	
Sat. 9.00 a.m. to 11.00 a.m.	

Mon	Tues	Wed	Thurs	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			

January 2002

February 2002

Mon	Tues	Wed	Thurs	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			

Mon	Tues	Wed	Thurs	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

March 2002

April 2002

Mon	Tues	Wed	Thurs	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					

Mon	Tues	Wed	Thurs	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		

May 2002

June 2002

Mon	Tues	Wed	Thurs	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

Mon	Tues	Wed	Thurs	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				

July 2002

August 2002

Mon	Tues	Wed	Thurs	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	

Mon	Tues	Wed	Thurs	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						

September 2002

October 2002

Mon	Tues	Wed	Thurs	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			

OUTCOME 1

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
				1	2 7.30 p.m. Cinema	3
4 Youth Club	5	6 Visit John	7 6 p.m. Hairdresser	8	9	10
11 Youth Club	12	13	14	15	16	17
18 Youth Club	19	20	21	22 Swimming	23 Gran's Birthday	24
25 Youth Club	26	27	28	29	30	

November 2002

December 2002

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
						1
2 5.30 p.m. Doctor	3	4	7	6	7 11 a.m. Xmas Shopping	8
9	10	11	12	13 7 p.m. Club Disco	14	15
16	17 8 p.m. Jim's Party	18 5 p.m. Haircut	19	20	21	22
23	24	25 Xmas Dinner	26	27	28	29
30	31					

Student Worksheet: Calendar Worksheet 1 – January

Look carefully at your monthly calendar for **January 2002**. Answer the questions and fill in the important dates for the month of January.

1.	What month	comes	before	January?	
----	------------	-------	--------	----------	--

- 2. What day is the first day in January?
- 3. What day is the last day in January?

Now fill in these important dates for you to remember in January. Write in the words you see in dark type like this: **This is in dark type**.

- 4. Thursday the 3rd of January **Back to school**.
- 5. You need to change some presents, which do not fit ... so Saturday the 5th Shopping with Mum.
- 6. You are going skating with your friend on the 12th Skating 11.00 a.m.
- You and your friend are going to the pictures on the 17th Pictures.
- 8. School outing to the Transport Museum on the 23rd Transport Museum.
- 9. Your birthday is on the 27th of January My birthday.
- 10. Burns' Night 25th of January Burns' Night.

OUTCOME 1

Student Worksheet: Calendar Worksheet 2 – February

Look carefully at your monthly calendar for February 2002, then answer the questions and fill in the important dates you are given for the month of February.

1.	What day is the first day in February?	
2.	What day is the last day in February?	
3.	How many days are in February?	
4.	Is 2002 a Leap Year? How many days	
	are there in February?	

Now fill in these important dates for you to remember in February. Write in the words you see in dark type like this: **This is in dark type**.

- (a) You will hope to receive a valentine in February Mark
 Valentine's Day.
- (b) Monday 18th of February Holiday.
- (c) Tuesday the 19th of February Holiday.
- (d) Your friend's birthday 24th February John's birthday.

1.	How many days are there from your			
	friend's birthday until the end of			
	February?			
2.	What is the date of the last Saturday in			
	February?			
3.	Your birthday is on the 23rd of February	– My birthday.		
4.	Mrs Smith's birthday is on the second Saturday in			
	February – Mrs S's birthday .			

Student Worksheet: Calendar Worksheet 3 – March

Look carefully at your monthly calendar for March 2002, then answer the questions and do the activities for the month of March.

- 1. How many **Fridays** are there in March?_____
- 2. Mark a green circle on March the 3rd.
- 3. Count seven days from this and mark a red cross.

From the 3rd of March to the 10th of March is 7 days

- 4. What is another name for 7 days?
- 5. Mark a black circle on the 18th of March.
- 6. Count seven days from this and mark a blue cross.

The blue cross is exactly below the black circle.

Each time we have counted seven days from one date to another. Each time the second date is exactly below the first date. In fact, no matter which date we choose on the calendar the date exactly below this is one week later. This is another way of counting weeks.

- 7. What is the date of the **last** Saturday in March?
- 8. Your birthday is on the 23rd of March, mark My birthday.

Student Worksheet: Calendar Worksheet 4 – April

Look carefully at your monthly calendar for April 2002, then answer the questions and do the activities for the month of April.

- 1. What is the month **before** April?
- 2. Mark a red cross on the 8th of April.
- 3. Mark a red cross exactly one week later.
- 4. Mark a green circle on the 17th of April.
- 5. Mark a green circle exactly seven days later.
- 6. How many days are there from the 13th to the 17th of April?
- 7. How many days are there from the 21st to the 26th of April?
- 8. Is it exactly one week from the 23rd to the 30th of April?
- 9. Is it exactly one week from the 2nd to the 8th of April?
- 10. What is special about the 1st of April?
- 11. How many full weeks are there in April?

The last day of April is a Tuesday.

12. What day is the 1st of May?

Student Worksheet: Calendar Worksheet 5 – May

Look carefully at your monthly calendar for May 2002, then answer the questions and do the activities for the month of May.

- 1. What is the month **before** May?
- 2. How many Sundays are there in May?
- 3. Mark a red cross on the 6th of May.
- 4. Mark a green cross exactly one week later.
- 5. Mark a blue circle one week later again.
- 6. How many weeks are there between the **red** cross and the **blue** circle?
- 7. What is another name for two weeks?

If you mark a date and count down two boxes on a calendar we count out **2 weeks** or **fourteen days** or a **fortnight**. Or, we can do it the long way and count fourteen days.

- 8. Put an orange dot on the 15th day of May.
- 9. Count down two boxes and put a red dot.
- 10. What is the date in the box with the red dot?

This means that the 29th of May is exactly two weeks after the 15th of May.

Student Worksheet: Calendar Worksheet 6 – June

Look carefully at your monthly calendar for June 2002 then follow the instructions and answer the questions below.

- 1. How many days are there in June?
- 2. How many Tuesdays are there in June?
- 3. What is the date of the second Wed. in June?
- 4. Fill these important dates into your diary for June. Write the words in the **dark type**.

Thursday 6th – **Dentist** Friday 14th – **Wee sister's birthday** Friday 21st – **School disco** Monday 24th – **Pictures** Wednesday 26th – **Swimming** Friday 28th – **Summer holidays** Tuesday 25th – **Skating with Laura**

- 5. How many days from the start of the summer holidays until you go skating?
- 6. If the last day in June is Sunday, what day is the 1st of July?
- 7. How many **full** weeks are there in June?

Note: A full week must have a Sun., Mon., Tues., Wed., Thurs., Fri. and Sat.

Student Worksheet: Calendar Worksheet 7 – July

Look carefully at your monthly calendar for July 2002 then follow the instructions and answer the questions below.

1.	How many days are there in July?	
2.	What day is the last day of July?	
3.	What month comes before July?	
4.	What month comes after July?	

- (a) Mark a red X on the 7th of July.
- (b) Count five days from this red X.
- (c) Mark a green circle.
- (d) What date does the green circle mark?
- (e) Mark an orange dot on Friday the 19th of July.

1.	What is the date of the Friday one	
	week before the 19th?	
2.	What is the date of the Friday one	
	week after the 19th?	
3.	What is the date of the Tuesday one	
	week before Tuesday the 9th of July?	

Student Worksheet: Calendar Worksheet 8 – August

Look carefully at your monthly calendar for August 2002, then follow the instructions and answer the questions below.

- 1. You are going to Blackpool on Saturday the 3rd of August. Mark an H on that day.
- 2. You come back on Thursday the 8th of August. Mark H on that date.
- 3. Now mark an H on every day between those two dates.
- 4. How many days were you away on holiday?
- 5. School starts six days after you return from holiday. What **day** and **date** does school begin?

Student Worksheet: Calendar Worksheet 9 – September

Look carefully at your monthly calendar for September 2002 and then complete the worksheet.

- 1. How many days are there from the 15th to the 24th of September?
- 2. How many days are there from the 2nd to the 7th of September?
- 3. Fill in the table with the dates of the days given below.

Day	Date
1st Thursday in September	
Last Saturday in September	
2nd Sunday in September	
3rd Tuesday in September	
4th Wednesday in September	
5th Monday in September	
1st Wednesday in September	

Student Worksheet: Calendar Worksheet 9b

1. Fill in the table below giving the date **before** or **after** the date in the first column.

Try counting on your fingers or in your head rather than using the calendar. There are a few important dates in this table. Colour them in red.

Date	Days before or after	Date
6th September	5 days after	
9th October	3 days before	
15th November	10 days before	
3rd January	2 days before	
1st February	12 days after	
29th July	2 days after	
8th March	4 days before	
10th October	5 days before	
20th August	10 days before	
30th June	5 days before	
2nd April	1 day before	
15th May	5 days before	
20th December	5 days after	

Student Worksheet: Calendar Worksheet 10 – October

Look carefully at your monthly calendar for October 2002 then follow the instructions and answer the questions below.

Date	Day
14.10.02	
22.10.02	
3rd October 2002	
30th October 2002	
7/10/02	
26/10/02	
09.10.02	

- 1. Fill in the table with the days of the dates given. Looking at the table you can see that there are several different ways of writing the date. You can use any one of these.
- 2. Fill in these important dates in October.
 - (a) School Holidays begin 11th October mark H
 - (b) School Holidays end 21st October mark H
- 3. Mark every day you are on holiday.
- 4. How many school days do you have off in October?
- 5. What day is the last day of October?
- 6. What day is the first day of November?

Student Worksheet: Calendar Worksheet 11 – November

Look carefully at your monthly calendar for November 2002 then follow the instructions and answer the questions below.

- 1. You are going to a fireworks display on **Guy Fawkes** Night. Draw a little bonfire on the correct date to remind you.
- 2. Look at the **November** calendar. Some dates are already filled in. Fill in more of your own if you have any other activities planned for this month.
- 3. Fill in the table below showing dates to remember for November.

Date	What you have planned:
Saturday 2nd November	
Wednesday 6th	
Thursday 7th	
Every Monday	
Friday 22nd	
Saturday 23rd	

- 4. What time is your hairdressing appointment?
- 5. How many times does the Youth Club meet in November?
Student Worksheet: Calendar Worksheet 12 – December

Look carefully at your monthly calendar for December 2002, then follow the instructions and answer the questions below.

- 1. What day is the first day in December?
- 2. What day is the last day in December?

Some important dates are written in your December calendar. Look carefully at them then fill in some of your engagements for December.

Date	What you have planned:
Monday 2nd	
Saturday 7th	
Friday 13th	
Tuesday 17th	
Wednesday 18th	
December 25th	

Some dates have been missed. Fill them in now.

- (a) Youth Club Party Saturday 14th.
- (b) December 31st Hogmanay Party Pat's.

Student Worksheet: Calendar Worksheets – Yearly

Use your yearly calendar for the year 2000 on page 44, and find what days these dates fall on.

15th June	
3rd October	
21st August	
5th June	
22nd December	
25th May	
8th September	
14th February	
20th November	
11th July	

Using your yearly calendar for the year 2000 on page 44, fill in the day and date of:

3rd Sunday in May	
4th Monday in June	
2nd Wednesday in January	
3rd Saturday in February	
2nd Tuesday in July	
4th Saturday in May	
5th Sunday in December	
1st Tuesday in July	
Last Wednesday in August	

Calendar Worksheet A: The Yearly Calendar

Fill the answers into the table below showing the dates before or after the given dates.

5 days after June 3rd	
1 week after April 9th	
2 weeks after December 7th	
3 days before January 12th	
4 days after Guy Fawkes' Day	
3 days before St Andrew's Day	
5 days after Christmas	
A fortnight after March 8th	
2 days before Hallowe'en	
10 days after April Fool's Day	

You will see that the dates you write in are still within the same month. In the next worksheets you will learn how to find the dates if we have to move to the next month.

Calendar Worksheet B: The Yearly Calendar

Look carefully at your yearly calendar for 2000 and then complete the worksheet.

- 1. What is the first month on your calendar?
- 2. What is the last month on your calendar?

On a yearly calendar the months are all in order.

- 3. Find March.
- 4. What month is after February?

It is important to pay careful attention to the names and order of the months on your yearly calendar because sometimes we have to count dates that go from one month to another. When we do this we must be sure to begin counting at the first day of the month.

- 5. Put a red circle round the 30th of January.
- 6. Count three days from this.

We must move on to February.

We count 31st January, 1st February and 2nd February.

Put a red circle round the 2nd of February.

Calendar Worksheet C: The Yearly Calendar

Look carefully at your yearly calendar for 2000 and then fill in the dates.

5 days after January 30th	
6 days after May 29th	
1 day after July 31st	
3 days after November 30th	
10 days after November 28th	
7 days after June 29th	
9 days after February 25th	
7 days after September 29th	
12 days after October 27th	
7 days after December 27th	

Calendar Worksheet D: The Yearly Calendar

Look carefully at your yearly calendar for 2000 and then complete the worksheet.

Remember if you wish to count in weeks, you count down one box for one week, two for two weeks and so on. Try these.

- 1. One week after January 12th
- 2. One week after August 16th
- 3. Two weeks after December 7th

Sometimes we have to move on to the next month. For example, one week after January 26th:

- We must move on to February.
- January the 26th is the last Wednesday in January.
- One week later is the first Wednesday in February.

We count the week by moving down the columns of days.

Try these:

1 week after February 24th	
1 week after June 26th	
1 week after July 29th	
1 week after October 30th	

Calendar Worksheet E: The Yearly Calendar

Look carefully at your yearly calendar for 2000 and then fill in the dates.

1 week after July 30th	
2 weeks after August 27th	
1 week after February 21st	
2 weeks after February 23rd	
3 weeks after May 22nd	
4 weeks after June 18th	
2 weeks after September 29th	
4 weeks after November 28th	
6 weeks after April 5th	
6 weeks after December 17th	

See note below

Note: December is a difficult one. You have to move from December of one year to January of the next year. If you are using the calendar for the year 2000, you also need the calendar for the year 2001.

Calendar Worksheet F: The Yearly Calendar

Look carefully at your yearly calendar for 2000, then answer the questions and fill in the dates.

Remember: If you have to move from December to January, you need the 2001 calendar as well as the 2000 calendar.

1 week after June 30th	
6 days after August 26th	
1 week before December 3rd	
2 weeks after October 23rd	
3 weeks before May 22nd	
4 days after June 30th	
2 weeks before September 9th	
4 weeks after December 28th	
3 weeks before April 5th	
2 weeks after December 27th	

Student Worksheet: Yearly Calendar

August						
М	Т	W	Т	F	S	S
					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						

September						
М	Т	W	Т	F	S	S
	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				

1. How many days from 4th August to 10th August?

2. How many days from 8th August to12th August?

- 3. How many days from 28th August to 31st August?
- 4. How many days from 7th September to 24th September?
- 5. How many days from 17th September to 24th September?

6. How many weeks from 6th August to 20th August?

7. How many weeks from 2nd August to 23rd August?

- 8. How many weeks from 9th September to 30th September?
- 9. How many weeks from 21st August to 4th September?
- 10. How many Mondays are there in August?

Student Worksheet: Yearly Calendar

November								
М	T W T F S S							
	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						

December						
М	Т	W	Т	F	S	S
			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	

- 1. How many days from 23rd November to 1st December?
- 2. How many days from 28th November to 6th December?
- 3. How many days from 27th November to 4th December?
- 4. How many days from 30th November to 6th December?
- 5. How many weeks from 26th November to 3rd December?
- 6. How many weeks from 17th November to 15th December?
- 7. How many weeks from 14th November to 19th December?
- 8. How many weeks from 6th November to 18th December?

OUTCOME 1

Student Worksheet: Yearly Calendar

	February					March					April									
М	Т	W	Т	F	S	S	М	Т	W	Т	F	S	S	М	Т	W	Т	F	S	S
		1	2	3	4	5			1	2	3	4	5						1	2
6	7	8	9	10	11	12	6	7	8	9	10	11	12	3	4	5	6	7	8	9
13	14	15	16	17	18	19	13	14	15	16	17	18	19	10	11	12	13	14	15	16
20	21	22	23	24	25	26	20	21	22	23	24	25	26	17	18	19	20	21	22	23
27	28						27	28	29	30	31			24	25	26	27	28	29	30

1.	How many days from 24th February to 2nd	
	March?	
2.	How many days from 28th March to 5th	
	April?	
3.	How many weeks from 27th March to 17th	
	April?	
4.	How many weeks from 16th February to 16th	
	March?	
5.	How many weeks from 20th February to 10th	
	April?	
6.	How many weeks from 11th February to 1st	
	April?	
7.	How many weeks from 14th February to 4th	
	April?	
8.	How many weeks from 17th February to 14th	
	April?	

9. John plays in the Football League on the first Monday of each month. Write in the dates he plays in February, March and April.

2000 Calendar

January											
М	Т	W	Т	F	S	S					
					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											

February										
W	Т	F	S	S						
2	3	4	5	6						
9	10	11	12	13						
16	17	18	19	20						
23	24	25	26	27						
	W 2 9 16 23	W T 2 3 9 10 16 17 23 24	W T F 2 3 4 9 10 11 16 17 18 23 24 25	W T F S 2 3 4 5 9 10 11 12 16 17 18 19 23 24 25 26						

March										
М	Т	W	Т	F	S	S				
		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						

June

1 2

3 4

M T W T F S S

	April											
М	Т	W	Т	F	S	S		М				
					1	2		1				
3	4	5	6	7	8	9		8				
10	11	12	13	14	15	16		1:				
17	18	19	20	21	22	23		22				
24	25	26	27	28	29	30		29				

	July											
М	Т	W	Т	F	S	S						
					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												

October											
М	Т	W	Т	F	S	S					
						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					
31											

May										
М	Т	W	Т	F	S	S				
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								

	August											
М	Т	W	Т	F	S	S						
	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									

November											
М	Т	W	Т	F	S	S					
		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								

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						
September										
М	Т	W	Т	F	S	S				
				1	2	3				

Μ	Т	W	Т	F	S	S
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11	12	13	14	15	16	17
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December									
М	Т	W	Т	F	S	S			
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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			

OUTCOME 1

2001 Calendar

January										
М	Т	W	S							
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								

	February										
М	Т	W	Т	F	S						
			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									

-									
March									
М	Т	W	Т	F	S	S			
			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				

June M T W T F S S

29 30

April									
М	Т	T W T F S							
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16	17	18	19	20	21	22			
23	24	25	26	27	28	29			
30									

July									
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9	10	11	12	13	14	15			
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23	24	25	26	27	28	29			
30	31								

October									
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15	16	17	18	19	20	21			
22	23	24	25	26	27	28			
29	30	31							

May									
М	Т	W	W T F S						
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14	15	16	17	18	19	20			
21	22	23	24	25	26	27			
28	29	30	31						

12	13	4	5	6	7
19	20	11	12	13	14
26	27	18	19	20	21
		25	26	27	28
				Sep	ten

		Α	ugu	st					Sep
М	Т	W	Т	F	S	S	М	Т	W
		1	2	3	4	5			
6	7	8	9	10	11	12	3	4	5
13	14	15	16	17	18	19	10	11	12
20	21	22	23	24	25	26	17	18	19
27	28	29	30	31			24	25	26

November								
М	Т	W	Т	F	S	S		
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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				

September								
М	Т	W	Т	F	S	S		
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10	11	12	13	14	15	16		
17	18	19	20	21	22	23		
24	25	26	27	28	29	30		

December								
М	Т	W	Т	F	S	S		
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10	11	12	13	14	15	16		
17	18	19	20	21	22	23		
24	25	26	27	28	29	30		
31								

2002 Calendar

	January								
М	Т	W	Т	F	S	S			
	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						

	February								
М	Т	W	Т	F	S	S			
				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						

March								
М	Т	W	Т	F	S	S		
				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		

April								
М	Т	W	Т	F	S	S		
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							

May								
М	Т	W	Т	F	S	S		
		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				

	June								
М	Т	W	Т	F	S	S			
					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			

July							
М	Т	W	Т	F	S	S	
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						

	August									
М	T W T F S									
			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					

October								
М	Т	W	Т	F	S	S		
	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					

November						
М	Т	W	Т	F	S	S
				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	

September						
М	Т	W	Т	F	S	S
						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						

		Dee	cem	ber		
М	Т	W	Т	F	S	S
						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					

Student Worksheet: The Yearly Calendar

1.	Which month is 8 months after October 2001?	
2.	Which month is 10 months after April 2000?	
3.	Which month is 14 months after February 2001?	
4.	Which month is 16 months after December 2000?	
5.	How many months are there from May 2000 until October 2001?	
6.	How many months from September 2000 until May 2002?	
7.	On the 1st of May 2000 the Head of Northpark School told students that there would be a school trip to Florida in 14 months' time. In what month and year would the trip take place?	
8.	In June 2000 Mary is in 3rd year. What year will she be in by September 2002?	
9.	Clare plans to save £10 a month. She begins saving in August 2000. How much will she have saved by April 2002?	
10.	Write the month and year when she will have saved £160.	
11.	Francis only manages to save £5 a month. How many months will it take him to save £50?	
12.	If he begins saving in November 2000, in what month and year will he have managed to save £80?	

48 USING MATHEMATICS IN EVERYDAY SITUATIONS 2 (ACC 2)

SECTION 2

Outcome 2

Student Worksheet: Methods of Payment

(a) Cash

Another name for coins or notes is cash. When we pay for something using coins and notes we pay by **cash**.

Usually we pay using cash if our bill is not too large.

Discuss some of the items we might pay for in cash then write them in the boxes below.

1.	
2.	
3.	
4.	
5.	

(b) Cheque

Some people prefer not to carry a lot of cash. They may prefer to use a **cheque** to pay for goods, particularly if the goods are expensive. If you do pay by cheque, you also need a **cheque card** to guarantee your cheque. This is just a way to ensure that the cheque book has not been stolen and is not being used by a person other than the person to whom it belongs. Discuss some of the items we might pay for by cheque then write them in the boxes below.

1.	
2.	
3.	
4.	
5.	

(c) Credit Cards and Debit Cards

If you pay for goods or services using a **credit card** (such as American Express or Diners), the amount is charged to your account and you must pay the whole amount when you receive a statement (usually once a month).

Look up the meaning of the word **Credit** in the dictionary.

Word	Meaning
Credit	

If you use a **debit card** (such as Access, Visa or Mastercard), the amount is charged to your account. When you receive a statement (usually once a month) you can choose to pay off the whole amount or just part of it. But if you repay only part of what you owe, the card company will charge you interest.

Look up the meaning of Interest in the dictionary.

Word	Meaning
Interest	

(d) Cash Card

Most people now have a **cash card**. We can use a cash card to take money out of our own account in the bank. We can also take cash from our account using a cash card in a **cashline machine**. This is obviously a very handy way to get cash as these machines are open twenty-four hours a day, seven days a week.

(e) Postal Order

At times, we have to pay bills by post. It is not really safe to send cash through the post as it may be stolen or lost and we have no way of getting it back. We could send a **cheque** if we have a cheque book. This is safer because the cheque is crossed and can only be cashed by the person named on the cheque, through their own bank. We may not have a cheque book. In this case we can send a **postal order**. This can be obtained in a **post office**. We have to pay a certain amount for this but it is much safer to send than cash as we get a **receipt** for the postal order and if it is lost or stolen, we are reimbursed or our money is repaid by the post office.

Student Worksheet: Methods of Payment

The words at the bottom of the page will help you to fill in the boxes.

1.	If you buy toiletries and pay for them with notes or coins, we call this paying by:	
2.	If you want to send money safely through the post, the best way is to send a:	
3.	If the bank is closed and you need money you can use a:	
4.	If you have a bank account and want to pay a bill but not in cash you would use a:	



Student Worksheet: Income

We all need money to live. We get this money from different sources.

(a) Wages

When we work for a living, we are paid wages. Another name for wages is salary. Our wages may be paid weekly or monthly.

(b) Child Benefit

The government pays Child Benefit to parents until their children leave school or reach the age of 19.

(c) Unemployment Benefit

If people cannot get a job, they still need money to live. Until they can get a job, they are paid unemployment benefit by the government.

(d) Pocket Money

Before they can get a job and while they are still at school, young people still need money to go out with their friends or to buy items like CDs, make-up, magazines, etc. Parents help them with this by giving them a certain amount of money each week. This is called **pocket money**.

Student Worksheet: Income and Methods of Payment 1

Tick the most suitable answer below about income and methods of payment.

			3
1.	John goes to the shop to buy a chocolate bar. How does he pay for this?	cheque	
		cash	
		postal order	
2.	Jill sends away for a new suit advertised in a magazine. How does she pay?	cheque	
		cash	
		postal order	
3.	Ian buys all his friends a meal in a nice restaurant. How does he pay?	cheque	
		cash	
		postal order	
4.	May has the chance of booking a holiday but must pay in cash today. It is Sunday. How does she get the money?	bank	
		cash machine	
		Visa	
5.	Jean sees a nice dress in the sale but does not get paid for a week. How does she buy the dress?	Access	
		postal order	
		cash	

Student Worksheet: Income and Methods of Payment 2

Tick the most suitable answer below about income and methods of payment.

			3
1.	Stephen is at school. He wants to buy a new computer game. What does he use?	wages	
		pocket money	
		unemployment benefit	
2.	Pat's dad is working in the car factory. Every Friday, money is paid into his bank account. What is this money called?	wages	
		pocket money	
		unemployment benefit	
3.	Mick's old firm has shut down and he hasn't been able to find work yet. He goes every week to claim what?	wages	
		pocket money	
		unemployment benefit	

Student Worksheet: Check your Change

How much change would you get from £1 if you bought goods costing these amounts?

1. 17p	2. 72p	3. 66p
4. 27p	5. 83p	6. 19p
7. 44p	8. 63p	9. 8p

How much change would you get from £3 if you bought goods costing these amounts?

1. £1.40	2. £2.70	3. £2.40	
4. £2.80	5. £2.30	6. £2.10	
7. £1.90	8. £1.70	9. £1.50	

How much change would you get from £5 if you bought goods costing these amounts?

1. £2.35	2. £3.75	3. £4.65
4. £3.25	5. £4.45	6. £2.85
7. £1.15	8. £5.00	9. £1.55
10. £1.38	11. £3.24	12. £4.17
13. £3.22	14. £1.54	15. £2.81
16. £1.98	17. £1.53	18. £4.51

Student Worksheet: Giving Money to the Nearest Amount and Calculating Change

Here are the prices of goods you have bought. You will not have the correct amount of money to give. Make up the money to the nearest pound. Fill this amount into the table below, and then fill in the change you will receive.



Student Worksheet: College Menu

College Menu	

Starters	
Soup	35p
Melon	50p
Fruit Juice	35p
Vegetables	
Potatoes	33p
Carrots	28p
Beans	25p
Mixed Veg.	28p
Main Course	
Main Course	
Main Course Breaded Haddock	£1.20
Main Course Breaded Haddock Hamburger	£1.20 £1.00
Main Course Breaded Haddock Hamburger Cheese Burger	£1.20 £1.00 £1.25
Main Course Breaded Haddock Hamburger Cheese Burger Veggie Burger	£1.20 £1.00 £1.25 99p
Main Course Breaded Haddock Hamburger Cheese Burger Veggie Burger Hot Dog	£1.20 £1.00 £1.25 99p 70p
Main Course Breaded Haddock Hamburger Cheese Burger Veggie Burger Hot Dog Pizza	£1.20 £1.00 £1.25 99p 70p 99p
Main CourseBreaded HaddockHamburgerCheese BurgerVeggie BurgerHot DogPizzaMacaroni Cheese	£1.20 £1.00 £1.25 99p 70p 99p £1.05
Main Course Breaded Haddock Hamburger Cheese Burger Veggie Burger Hot Dog Pizza Macaroni Cheese Chicken & Chips	£1.20 £1.00 £1.25 99p 70p 99p £1.05 £1.25
Main Course Breaded Haddock Hamburger Cheese Burger Veggie Burger Hot Dog Pizza Macaroni Cheese Chicken & Chips Baked Potato	£1.20 £1.00 £1.25 99p 70p 99p £1.05 £1.25 72p
Main Course Breaded Haddock Hamburger Cheese Burger Veggie Burger Hot Dog Pizza Macaroni Cheese Chicken & Chips Baked Potato Fillings	£1.20 £1.00 £1.25 99p 70p 99p £1.05 £1.25 72p 50p

Salads	
Chicken	£1.50
Ham	£1.55
Tuna	£1.30
Cheese	£1.20
Egg Mayonnaise	£1.10
Chips	
Small	53p
Large	72p
Desserts	
All Sweets	62p
Custard	30p
Extras	
Plain Roll	25p
Soft Drink	42p
Tea	34p
Coffee	46p
Milk-shake	77p

Student Worksheet: Paying your Bill 1

Look at the College Menu. Work out how much it would cost for these meals or snacks. Write in the money you will give to the nearest pound and the change you will receive.

1.

Item Bought	Price
Milk-shake	
Chicken Salad	
Total:	

Money Given	Change Received

2.

Item Bought	Price
Soup	
Plain Roll	
Coffee	
Total:	

Money Given	Change Received

3.

Item Bought	Price
Fruit Juice	
Breaded Haddock	
Small Chips	
Total:	

Money Given	Change Received

4.

Item Bought	Price
Chicken and Chips	
Beans	
Plain Roll	
Soft Drink	
Sweet	
Total:	

Money Given	Change Received

5.

Item Bought	Price
Melon	
Macaroni Cheese	
Small Chips	
Custard	
Теа	
Total:	

Money Given	Change Received

Student Worksheet: Paying your Bill 2

Look at the College Menu. You have £4.00 for lunch each day. Write out what you will choose each day for lunch. Total your bill then work out the change you receive from your £4.00. At the end of the 5 days, how much money have you saved from your lunch money?

Day 1	
	• •
	:
	:
	:
	:
Total:	:
	:
Money given:	:
Change:	•

Day 2	
	:
	:
	:
	:
	•
	•
Total	
I Utal.	•
	•
Money given:	:
Change:	:

Day 3	
	•
	:
	:
	:
	:
	:
Total:	:
	:
Money given:	:
Change:	:

Day 4	
	:
	:
	:
	:
	:
	:
Total:	:
	:
Money given:	:
Change:	:

OUTCOME 2

Day 5	
	:
	:
	:
	:
	:
	:
Total:	:
	:
Money given:	:
Change:	:

Day	Money left
1	
2	
3	
4	
5	
Total:	

Student Worksheet: Menu for MacDuff's Café



Plate of Homemade Soup	70p
Plain Hamburger	99p
Cheese Burger	£1.20
Baked Potato with Butter	£1.00
Baked Potato with Coleslaw	£1.35
Chicken Sandwich	£1.25
Salad Roll	£1.25
Plain Roll	30p
Annle Pie	75n
Apple Tie	f1 10
	£1.10
Fruit Sundae	£1.50
Tea	50p
Coffee	70p
Milk	60p
Milk-shake	85p
Coke	99p
Chocolate Biscuit	20p
Cake	25p

Student Worksheet: Paying your Bill 3

You have just got a job working as a waiter or waitress in MacDuff's Café. You take the orders, count up the bill and then give the change. Here are the orders of some of the customers. Work out their bill and their change.

Order 1	
Plate of Soup	• •
Plain Roll	• •
Potato with Coleslaw	•
Fruit Sundae	•
Apple Pie	•
Теа	• •
Coke	•
Total:	•
	•
Money given:	•
Change:	•

Order 2		
Chicken Sandwich	•	
Cheese Burger	•	
Salad Roll	•	
Tea	•	
Coffee	•	
Milk-shake	•	
Chocolate Biscuit	•	
Total:	•	
	•	
Money given:	•	
Change:	•	

Order 3		
Potato with Butter	•	
Plain Hamburger	•	
Potato with Coleslaw	•	
Apple Pie & Ice-	•	
Cream		
Apple Pie	•	
Milk	•	
Total:	•	
	•	
Money given:	:	
Change:	:	

Order 4		
2 Soups	:	
2 Plain Rolls	•••	
Tea	•••	
Milk	•	
Cake	•	
Chocolate Biscuit	•	
Total:	•	
	•	
Money given:	•	
Change:	•	

Student Worksheet: The Corner Shop

Here is the price list for items sold in the local shop.

Item	Price	Item	Price
Tea Bags (80)	85p	Mixed Fruit Jam	68p
Tea Bags (160)	£1.60	Strawberry Jam	78p
Custard Creams	62p	Lemon Curd	68p
Fruit Shorties	29p	Table Jelly 4 Pack	£1.27
Porridge Oats	39p	Tuna in Brine	65p
Brown Sauce	55p	Hot Dog Sausages	45p
Tomato Sauce Family Size	£1.24	Corned Beef	65p
4 Pack Beans	35p	Tinned Salmon	96p
Baby Beetroot Large	47p	Orange Juice Carton	25p
Cream of Chicken Soup	41p	Blackcurrant Juice	25p
Cream of Tomato Soup	41p	1 Litre Blackcurrant Juice	£1.78
Lentil Soup Family Size	41p	Furniture Polish	£1.99
Vegetable Soup Family Size	41p	4 Pack Deodorant	£2.45
Macaroni Pasta	55p	Large Washing Powder	£2.69
Spaghetti Pasta	45p	Tissues	69p
6 Pack Fresh Orange	£1.38	Washing Up Liquid	£1.99
Lentils	59p	Toilet Soap (1 Pack)	85p
Orange Marmalade	68p	Toilet Rolls (4 Pack)	£2.96
Cornflakes	£1.60	4 Pack Kitchen Roll	£1.70

OUTCOME 2

This is John's shopping list. Fill in the prices and work out his change.

	Item	Cost
1.	Tomato Sauce	
2.	Litre Blackcurrant Juice	
3.	Tea Bags (160)	
4.	Orange Marmalade	
5.	Fruit Shorties	
6.	Tissues	
	Total:	

John has:	£8.00
His shopping costs:	£
His change is:	£

Here are some more shopping lists.

- 1. Check the price list and mark in the prices.
- 2. Add up the cost of each person's shopping and put in the total.
- 3. Work out the change each shopper would receive.

	Item	Price
1.	2 tins of Corned Beef	
2.	Tin Salmon	
3.	6 pack Fresh Orange	
4.	1 pack Toilet Rolls	
5.	Macaroni Pasta	
6.	Tomato Sauce	
	Total:	

Mary has:	£7.00
Her shopping costs:	£
Her change is:	£

	Item	Price
1.	Cornflakes	
2.	Tea Bags (80)	
3.	2 tins Hot Dog Sausages	
4.	Custard Creams	
5.	Baby Beetroot	
6.	Orange Marmalade	
	Total:	

Martin has:	£6.00
His shopping costs:	£
His change is:	£

OUTCOME 2

	Item	Price
1.	Washing Powder	
2.	Tissues	
3.	Tuna	
4.	Strawberry Jam	
5.	6 pack Fresh Orange	
6.	4 pack Beans	
	Total:	

Mrs Hall has:	£10.00
Her shopping costs:	£
Her change is:	£

	Item	Price
1.	1 litre Blackcurrant Juice	
2.	Tomato Sauce family size	
3.	2 packs Spaghetti Pasta	
4.	Vegetable Soup family size	
5.	2 packets Porridge Oats	
6.	Lemon Curd	
	Total:	

Mrs Nelson has:	£10.00
Her shopping costs:	£
Her change is:	£
On this page there are some shopping lists for you to use.

- 1. Choose the items and write them down in the first column.
- 2. Check the prices and write them in too.
- 3. Add up the cost of your shopping and write in the total.
- 4. Mark in the amount to the nearest pound you will give the shopkeeper.
- 5. Work out the change you should receive.

	Item	Price
1.		
2.		
3.		
4.		
5.		
6.		
	Total:	

You give:	
Your shopping costs:	
Your change is:	

	Item	Price
1.		
2.		
3.		
4.		
5.		
6.		
	Total:	

You give:	
Your shopping costs:	
Your change is:	

Student Worksheet: Budgeting on Holiday

You are on holiday for one week. You have a daily allowance of $\pounds 15.00$. Here are some of the places you might choose to visit and the cost of the visit. You should keep some money for presents.

Cinema	£3.50
Ice Rink	£2.75
Bowling	£3.76
Swimming	£1.60
Café	£4.25
Fair	£5.00
Cycle Hire	£1.20
Go-karting	£2.80

Work our how much it would cost you to go to these places and how much you would have left out of your daily allowance.

Day	Visits	Cost	Left
1.	Cinema only	£3.50	£11.50

2.	Ice Rink	
	Fair	
	Café	
	Total:	

3.	Cinema	
	Café	
	Total:	

4.	Swimming	
	Bowling	
	Fair	
	Total:	

5.	Cinema	
	Ice Rink	
	Swimming	
	Cycle Hire	
	Total:	

6.	Café	
	Ice Rink	
	Go-karting	
	Cinema	
	Total:	

7.	Cycle Hire	
	Café	
	Go-karting	
	Bowling	
	Total:	

- 1. On which day did you spend most?
- 2. On which day did you spend least?
- 3. At the end of the week, how much money did you have left to buy presents?

Student Worksheet: Budgeting 1

Here is a table showing items you might need. You have a certain amount of pocket money each week. You must budget this money each week and not overspend.

The amount changes each week in this exercise so make sure you check how much you have to start.

Items	Cost
Deodorant	90p
After-shave	£1.20
Make-up	£2.00
Body-spray	£1.30
Perfume	£2.45
Soap	42p
Hair spray	£1.85
T-shirt	£1.99
Tights	99p
Socks	£2.10
Bus fares to town	£1.50
Cinema	£3.00
Skating	95p
Band concert	£5.00
Swimming baths	£1.80
Crisps	25p
Drink	45p
Chips	£1.65
Milk-shake	80p
Chocolate biscuit	18p
Pencil	27p
Ruler	85p
Rubber	30p

- Look carefully at the amount of money you have to spend
- Choose a list of items you might buy
- In the weeks when you have more money, you should try to buy the dearer items like T-shirts or perfume.

The first example has been done for you.

Amount you have to	£10.00	Amount you have	£10.00
spend:		to spend:	
Items to buy			
1. Make-up	2:00		
2. Soap	0:42	Amount you spend:	£4:07
3. Chips	1:65		
Total:	£4:07	Amount you save:	£5:93

Amount you have to	£5.00	Amount you have	£5.00
spend:		to spend:	
Items to buy			
1.	•		
2.	•	Amount you spend:	:
3.	:		
Total:	•	Amount you save:	:

Amount you have to	£7.00	Amount you have	£7.00
spend:		to spend:	
Items to buy			
1.	:		
2.	:	Amount you spend:	:
3.	•		
Total:	•	Amount you save:	:

Amount you have to	£8.00	Amount you have	£8.00
spend:		to spend:	
Items to buy			
1.	•		
2.	•	Amount you spend:	•
3.	•		
Total:	•	Amount you save:	•

Amount you have to	£3.00	Amount you have	£3.00
spend:		to spend:	
Items to buy			
1.			
2.	•	Amount you spend:	:
3.	•		
Total:	•	Amount you save:	•

Amount you have to	£2.50	Amount you have	£2.50
spend:		to spend:	
Items to buy			
1.	•		
2.	•	Amount you spend:	•
3.	•		
Total:	•	Amount you save:	•

Now here are some blank tables for you to write in different amounts of pocket money.

Amount you have to		Amount you have	
spend:		to spend:	
Items to buy			
1.	•		
2.	•	Amount you spend:	•
3.	•		
Total :	•	Amount you save:	•

Amount you have to		Amount you have	
spend:		to spend:	
Items to buy			
1.	:		
2.	:	Amount you spend:	•
3.	•		
Total:	:	Amount you save:	:

Amount you have to		Amount you have	
spend:		to spend:	
Items to buy			
1.			
2.	•	Amount you spend:	•
3.	•		
Total:		Amount you save:	:

Student Worksheet: Budgeting 2

Everyone has to look after his or her money and be careful not to overspend. In other words they must budget their money. It is important to pay attention to how we spend our money and we may even keep a note of this to help us.

Below is a list of things students need money for. The amount each student spends is different but they must all stay within their budget.

The most important items are:

- (a) Board and Lodging
- (b) Travel
- (c) Leisure

We must also try to save some money each week for holidays, clothes, etc.

Below are the amounts different students spend each week. Fill these amounts into the table for each student and work out their savings over a period of four weeks. Each has an amount of money each week to use for these items.

Patrick: Income per week – £50

Week 1		We
Board and Lodgings	£20	Boa
Travel	£10	Tra
Leisure Items	£3	Lei
Week 3		We
Board and Lodgings	£20	Boa
Travel	£10	Tra
Leisure Items	£5	Lei

Week 2	
Board and Lodgings	£20
Travel	£10
Leisure Items	£6
Week 4	
Board and Lodgings	£20
Travel	£10
Leisure Items	£7

Fill in the table below showing the total Patrick spends on each item, his total spent and his total savings over four weeks.

Week	Travel	Leisure	Board &	Total	Total
		Items	Lodgings	spent	saved
1					
2					
3					
4					
Total					

How much did Patrick save over the four weeks?

Gillian: Income per week – £60

Week 1		W
Board and Lodgings	£25	В
Travel	£8	Т
Leisure Items	£12	L
Week 3		W
Board and Lodgings	£25	В
Travel	£8	Т
Leisure Items	£5	L

Week 2	
Board and Lodgings	£25
Travel	£8
Leisure Items	£10
Week 4	
Board and Lodgings	£25
Travel	£8
Leisure Items	£9

Fill in the table below showing the total Gillian spends on each item, her total spent and her total savings over four weeks.

Week	Travel	Leisure	Board &	Total	Total
		Items	Lodgings	spent	saved
1					
2					
3					
4					
Total					

How much did Gillian save over the four weeks?_____

Brian: Income per week – £30

Week 1		Wee
Board and Lodgings	£12	Boa
Travel	£4	Trav
Leisure Items	£12	Leis
Week 3		Wee
Board and Lodgings	£12	Boa
Travel	£4	Trav
Leisure Items	£6	Leis

Week 2	
Board and Lodgings	£12
Travel	£4
Leisure Items	£10
Week 4	
Board and Lodgings	£12
Travel	£4
Leisure Items	£14

Fill in the table below showing the total Brian spends on each item, his total spent and his total savings over four weeks.

Week	Travel	Leisure	Board &	Total	Total
		Items	Lodgings	spent	saved
1					
2					
3					
4					
Total					

How much did Brian save over the four weeks?

(a)	Who saved most money over the four weeks?	
(b)	Who spent most on leisure items?	
(c)	Who needed to spend most on travel?	

SECTION 3

Student Worksheet: Measuring Distance

1.	Jill shares her ribbon with her friend Joan.	
	She cuts the ribbon in half giving Joan	
	30cm. How long was the whole ribbon?	
2.	Four boxes together measure 40cm. How	
	long is each box?	
3.	John walks four times round the lake. He	
	has walked 8 kilometres. How far has he	
	walked if he only walks once round the	
	lake?	

In the table below are the distances some students live from their school.

Fill in the distance each student travels every day remembering both the journey to school in the morning and home from school in the afternoon.

Student's Name	Distance Home to	Distance to School
	School	and Home again
Michael	2 kilometres	kilometres
Jason	6 kilometres	kilometres
Frank	5 kilometres	kilometres
William	9 kilometres	kilometres
Andrew	10 kilometres	kilometres

Some students live nearer and go home for lunch. How far do they walk each day?

Student's Name	Distance Home to	Distance to School
	School	and Home again × 2
Amanda	_ kilometre	kilometres
Allan	250 metres	kilometres
Craig	400 metres	kilometres
Jamie	1 kilometre	kilometres
Pauline	300 metres	kilometres

Often we must measure things very accurately. For example, when we buy material, ribbon, clothes, shoes, food, etc., we want to buy exactly what we have paid for **or** what we need **or** what fits us.

We therefore need to use exact measurements and we need to have tools to measure each item accurately.

We measure length or distance using:

Millimetres Centimetres Metres Kilometres

The shortened method of writing these words is:

Millimetres (mm) Centimetres (cm) Metres (m) Kilometres (km)

There are:

10mm in 1cm 100cm in 1m 1,000m in 1km

We use several different measuring instruments to measure the different distances.

The ones we will use in school are:



We will choose the one that is most suitable for the lengths or distances we wish to measure.

Look carefully at your **ruler**. You will see that it is divided into equal parts. The tiny little spaces are **millimetres**. If you count these you will see that when you reach **10 millimetres** there is a longer line with a number. This is one centimetre. Another way of saying this is that each centimetre is divided into 10 millimetres.



A ruler

If we want to measure small lines we would use a ruler. An example of when we would use a **ruler** is if we were measuring the length of **a line drawn on a page**.

A ruler only measures up to 30cm, so if we are measuring lengths much longer than this we would probably use a metre stick.

A metre stick

This measures up to 100cm. An example of when we would use a **metre stick** is if we wanted to measure the **width of the classroom**.



A tape measure

These vary in length. We would use a tape if we were sewing, or measuring the corridor, a football pitch or other longer distances.



A trundle wheel

Like a tape, we would use a trundle wheel to measure longer distances such as the corridor or the length or breadth of a football pitch.



Here is a table showing the measurements of length or distance and how we can break them up into smaller parts.

Kilometre

1km =	1,000m
_km =	500m
_km =	250m

Metre

1m =	100cm
_m =	50cm
_m =	25cm

Centimetre

1 cm =	10mm
_cm =	5mm

Here are some lengths or distances you have to measure. Choose from the box the most suitable tool to use to measure each and write this in the grid below.

> Ruler Metre stick Tape measure Trundle wheel

	Item to measure	Tool used
1.	Short line.	
2.	Width of teacher's desk.	
3.	Length of classroom.	
4.	Length of corridor.	
5.	Width of football pitch.	
6.	Length of fence round your house.	
7.	Height of classroom door.	
8.	Length of your foot.	
9.	Width of your finger.	
10.	Your waist.	

Here are some lengths or distances you have to measure. Choose from the box the most suitable measurements to use to measure each and write them in the grid below.

> Kilometre Metre Centimetre Millimetre

	Item to measure	Tool used
1.	Glasgow to London.	
2.	The width of a butterfly.	
3.	The distance round your house.	
4.	Cumbernauld to Motherwell.	
5.	The length of your finger.	
6.	The length of your class.	
7.	Width of the window.	
8.	Your hand span.	
9.	The distance round your head.	
10.	The length you can jump.	

Use your ruler and draw lines these lengths.

1.	5 centimetres	
2.	10 centimetres	
3.	7 centimetres	
4.	4 centimetres	
5.	3 centimetres	

Use your ruler and measure these lines in centimetres. Write the length of each above the line.

The students were making decorations for school. Some of them made the lengths too long and had to halve them. What length were they when they were halved?

Line Length	Half
12 centimetres	centimetres
8 centimetres	centimetres
6 centimetres	centimetres
10 centimetres	centimetres

The students were not doing well (or are teachers just never happy?). Some had cut their pieces too small and were asked to cut pieces double the size they had. Write down the new sizes they should cut.

Line Length	Double
7 centimetres	centimetres
8 centimetres	centimetres
10 centimetres	centimetres
11 centimetres	centimetres

- 1. Draw a line 6cm long.
- 2. Draw a line double that size.
- 3. Draw a line 20cm long.
- 4. Draw a line half that length.
- 5. A triangle has three sides.
 All the sides are the same length.
 All sides are 5cm long.
 What is the length of all the sides together? ______
- 6. A square has four sides. All the sides are the same length. The length of one side of a square is 3cm. What is the length of all sides added together?
- 7. The length of all the sides of a square added together is 4cm. What is the length of each side?
- 8. The length of all the sides of a square added together is 8cm. What is the length of each side?

1.	Draw a line 6cm long.
2.	Draw a line double this length.

1.	Draw a line 12cm long.
2.	Draw a line half this length.

1.	Draw a line 16cm long.
2.	Draw a line quarter this length.

1.	Draw a line 2cm long.
2.	Draw a line double this length.

Measure the lines below and write the lengths above the line.

Circle the measuring tool you used to measure these lines.

measuring tape ruler trundle wheel

From the selection of measuring equipment, choose the correct measuring device and measure these items.

Equipment to choose from for measurement of length.

Ruler measuring cms Metre stick Trundle wheel Tape measure

Date	Items to measure	Equipment used	Measurement	Tick and sign
	Width of your desk			
	Length of teacher's desk			
	Height of classroom door			
	Around your head			
	Your waist			
	Length of corridor			
	Length of classroom			
	Line drawn below			

Draw a line 14cm long using your ruler.

Measure the line below and write the length in the box below the line.



Satisfactory standard achieved Yes/No

Signed:





Look at the scales above. We see that:

- (a) 1,000 grams make 1 kilogram.
- (b) 2×500 grams make 1 kilogram.
- (c) 4×250 grams make 1 kilogram.

Here is another way of breaking up 1 kilogram.

1 kilo =	1,000 grams
_ kilo =	500 grams
_ kilo =	250 grams
_ kilo =	750 grams

There are two types of scales we use in our homes or schools.

1. Kitchen scales

We use kitchen scales to measure lighter items such as ingredients for a recipe, small bags of sweets, etc. Kitchen scales are built to weigh differing amounts. Some weigh only up to 2 kilograms or 2,000 grams. Others will weigh up to 5 kilograms. For weights heavier than these, we use bathroom scales.



2. Bathroom scales

These will weigh heavier amounts or items such as large bags of potatoes or carrots, bricks, etc. They also weigh different amounts according to the ones we choose to buy. Bathroom scales will weigh weights or items up to around 10 kilograms. If you think about it, they must be able to weigh a very tall, very heavy man or woman.



Remember: We choose the scales to use, according to what we have to weigh.



Match the type of scales you would use to the items you have to weigh. Use a ruler to make your work neater.

Ten bricks

Bag of cement

Butter to make sponge cake

Bag of sand

Yourself

Small bag of sweets

Box of crisps

Packet of biscuits

Large bag of potatoes

Large bag of compost

Bag of sugar

A computer

Your headteacher

A bar of chocolate





These scales must balance. This means that the weights on both sides must come to the same amount. The big weight is the same weight as the two small ones. The small weights on each set of scales are exactly the same.

So each big weight weighs double each small weight on the same scale. Some of the numbers on the weights have been missed out. Fill in the missing weights.



Student Worksheet: Measuring Weight 3

Weigh the items listed on page 96, write the names and the weights in the correct columns.



Items weighed	Weight	Weighed accurately
0		Yes/No

Signed	Date	
-		

Items weighed	Weight	Weighed accurately Yes/No

Signed	Date	
·		

Items weighed	Weight	Weighed accurately Yes/No

Use the scales to measure out some vegetables and fruit, filling in the table as you go along.

Date	Items to measure	Weight	Tick and sign if accurate

Satisfactory standard achieved Yes/No

Signed: _____

Fill in these weights.

_ kilogram	grams
_ kilogram	grams
_ kilogram	grams
1 kilogram	grams

Find out the total weights of these items.

1.	Coffee – 100 grams and Lentils – 400 grams
	Total Weight =
	Is this more or less than 1 kilogram?
2.	Peppers – 100 grams and Apples – 550 grams Total Weight = Is this more or less than 1 kilogram?
3.	Sausages – 300 grams and Table Salt – 750 grams Total Weight = Is this more or less than 1 kilogram?
4.	Sugar – 1,000 grams and Butter Beans – 375 grams Total Weight = Is this more or less than 1 kilogram?
5.	Dried Peas – 450 grams and Garlic – 50 grams Total Weight = Is this more or less than 1 kilogram?
6.	Chicken Roll – 200 grams and Carrots – 600 grams Total Weight = Is this more or less than 1 kilogram?

Here are some of the goods sold in the Firpark Supermarket. Use this sheet to help you with the next worksheets and find the answers to the problems given.

Product	Weight	Product	Weight
	in grams		in grams
Tea Bags (160)	500 g	Table Salt	750 g
Coffee	100 g	Sugar	1,000 g
Porridge Oats	400 g	Spaghetti Pasta	700 g
Butter Beans	375 g	Macaroni Pasta	1,000 g
Large Butter	500 g	Lentils	400 g
Small Butter	250 g	Dried Peas	450 g
Garlic 3 pack	50 g	Ham and Pork	150 g
Peppers	100 g	Cooked Ham	150 g
Pack Tomatoes	300 g	Chicken Roll	200 g
Pack Carrots	600 g	Large Bacon	500 g
Turnip – half	350 g	Small Bacon	250 g
Apples	550 g	Sausage	300 g



Fill in these weights.

_ kilogram	grams
_ kilogram	grams
_ kilogram	grams
1 kilogram	grams

Find out the total weights of these items.

1.	Porridge Oats – grams and Lentils – grams
	Total Weight =
	Is this more or less than 1 kilogram?
2.	Turnip – grams and Ham and Pork – grams
	Total Weight =
	Is this more or less than 1 kilogram?
3.	Large Bacon – grams and Macaroni Pasta – grams
	Total Weight =
	Is this more or less than 1 kilogram?
4.	Tea Bags – grams and Large Butter – grams
	Total Weight =
	Is this more or less than 1 kilogram?
5.	Cooked Ham – grams and Garlic – grams
	Total Weight =
	Is this more or less than 1 kilogram?
6.	Small Bacon – grams and Spaghetti Pasta – grams
	Total Weight =
	Is this more or less than 1 kilogram?

Fill in these weights.

_ kilogram	grams
_ kilogram	grams
_ kilogram	grams
1 kilogram	grams

Find out the total weights of these items.

1.	One whole turnip
	Total Weight =
	Is this more or less than _ kilogram?
2.	2 Packs of Tomatoes Total Weight =
	Is this more or less than kilogram?
3.	2 Jars of Coffee
	Total Weight =
	Is this more or less than _ kilogram?
4.	2 Packs of Lentils
	Total Weight =
	Is this more or less than _ kilogram?

- 5. 2 Packs of Apples
 Total Weight =
 Is this more or less than _ kilogram?
- 6. 80 Tea Bags Total Weight = Is this **more** or **less** than 1 kilogram?




Student Worksheet: Weighing 5

Here is the recipe for a small Christmas cake.

You receive a phone call to say the whole family are coming to visit.

You now need to make the large size of cake.

To make the large size you must double the quantity of each ingredient. So that you don't get mixed up, write the new amounts down.

Small Christmas Cake	Large Christmas Cake
Ingredients:	Ingredients:
300g mixed fruit	mixed fruit
6 glacé cherries	glacé cherries
100g margarine	margarine
100g sugar	sugar
200g S.R. flour	S.R. flour
150ml water	water
1 level teaspoon mixed spice	level teaspoon mixed spice
1 egg	egg

Student Worksheet: Weighing 6

Mum has a recipe for scones you would like to make. She usually makes lots for the family. However, you think you would be better trying a small amount for your first attempt. Mum says just to halve the ingredients. To make it easier you decide to write down the new amount.

Scones	
Ingredients:	Ingredients:
200g self-raising flour	self-raising flour
50g sugar	sugar
50g margarine	margarine
100g sultanas	sultanas
100ml milk	milk