Mathletics

Series G Teacher

Time

Series G – Time

Contents

Series Authors:

Rachel Flenley
Nicola Herringer

Series G – Time

Pages 1–2

1a 5:00 am

b 6:30 am

c 8:15 pm

d 11:11 am

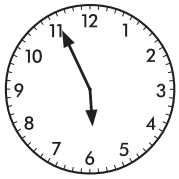
2a 8:30 pm

b 11:47 am

c 5:17 am

d 6:50 pm

3a



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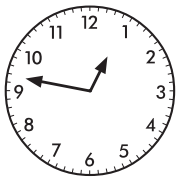

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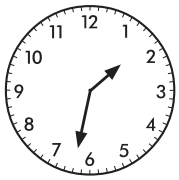

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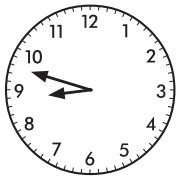

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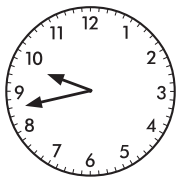

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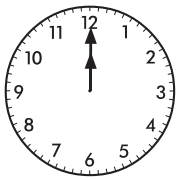

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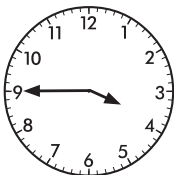

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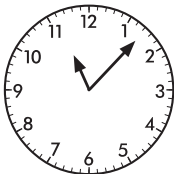
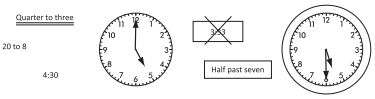


4a, b



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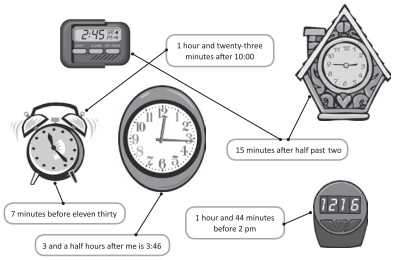
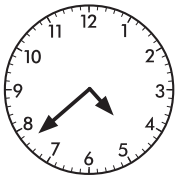


6 4:38;
38 past 4;
22 minutes to 5



Pages 3–4

1a 10:10

b 19:35

c 23:05

d 02:20

e 03:05

f 19:15

2a 04:25

b 21:35

c 00:25

d 12:40

e 03:30

f 14:45

g 20:15

h 10:20

3a 1:15 pm

b 5:14 am

c 11:30 pm

d 2:45 am

4 00:45
02:30
03:30
05:45
07:45
14:00
15:20
16:56
19:05
21:35

5a 1:30 pm or 01:30

b Spooky Movie

c 15 minutes

d 12:30 pm or 12:30

Pages 5–6

1

Cleethorpes	13:00
Grimsby	14:15
Keelby Village	13:00; 14:00; 15:00
Humber Bridge	16:45; 17:45
Hull	16:10; 17:10

a 2 hours

b 3 hours 10 minutes

c Once an hour

d Once an hour/10 past the hour

e Bus 1 at 09:00

f Bus 3 at 13:00

g 5 hours 10 minutes

2a Comedy

b 1 hour 15 minutes

c 75 minutes

Series G – Time

Pages 5–6

3a 9:45 am

b 12:07 pm

c £7.50

d 10 minutes

e £5.30

Page 7

Family	Flight Number				Time				Theme Park			
	762	938	513	165	14:38	15:15	16:45	17:53	SW	US	DL	KBF
Nicholls	✓	✖	✗	✗	✓	✗	✖	✗	✓	✗	✗	✗
Herringer	✖	✓	✖	✖	✖	✖	✓	✖	✗	✓	✗	✗
Flenley	✗	✖	✓	✗	✗	✓	✖	✗	✗	✗	✓	✗
Kirk	✗	✖	✗	✓	✗	✗	✖	✓	✗	✗	✗	✓

Page 8

What to do

Observe students.

What to do next

Observe students.

Pages 9–10

1a 420

b 540

c 6

d 7

e 4

f 1,200

2a 4

b 6

c 6

d 7

e 7

f 9

3a 260

b 192

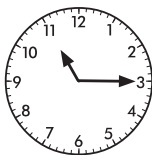
c 140

d 8

e 20

f 100

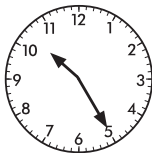
4a



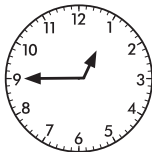
b

c

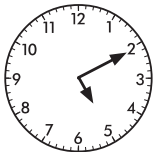
d



5a



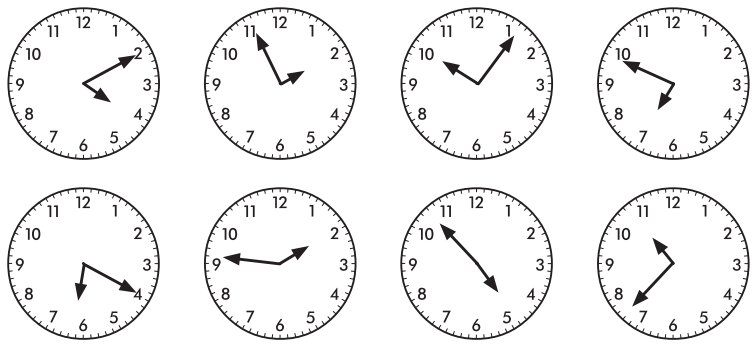
b



c

d

6



Pages 11–12

1a 1 hr 52 mins

b 3 hrs 54 mins

c 2 hrs 42 mins

2, 5:10 pm

d 2 hrs 37 mins

2, 7:15 pm

2a 4:54 am

b 7:12 am

3a 1:23 pm; 1:37 pm; 1:49 pm

b 11:20 am

Pages 13

What to do

Dakota

What to do next

Observe students.

Pages 14–15

What to do

Observe students.

Series G – Time

Pages 16–17

1

January

S	M	T	W	T	F	S
31					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

February

S	M	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						

March

S	M	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			

April

S	M	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	

May

S	M	T	W	T	F	S
30	31					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

June

S	M	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			

July

S	M	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

August

S	M	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				

September

S	M	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		

October

S	M	T	W	T	F	S
31					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

November

S	M	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				

December

S	M	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	

2a Once

b Thursday

c Saturday

3 Weekly;

£50 × 12 = £600 (monthly)

£12 × 52 = £624 (weekly)

4a Sunday 7th March or Tuesday 9th March

b Friday 16th April

c Wednesday 30th June

Pages 18–19

1 Answers will vary.

2a Spain; 40.35°N, 3.60°W

b Thailand; 14.73°N, 101.11°E

c Finland; 60.08°N, 25°E

Source: Google maps, viewed 2010.

3a 18, behind

b 7, ahead

c 4, behind

4a 10 am

b 12:00 midnight

c 6 pm

d 1 pm

5a 6 pm

b 1 am

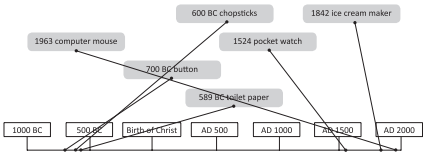
Pages 21

What to do

Observe students.

Page 22

Getting ready



a 485 in 2009

b 700

c 2,442

What to do

Observe students.

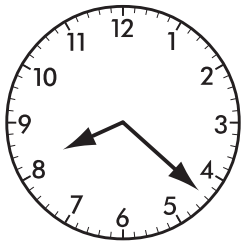
What to do next

Observe students.

Telling time

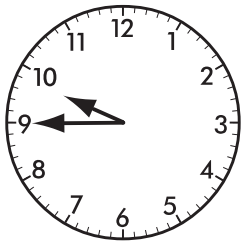
Name _____

1 **Express the following as digital times:**



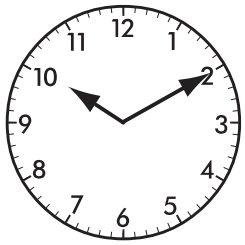
afternoon

a : pm



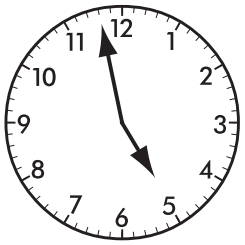
morning

b : am



evening

c : pm



morning

d : am

2 **Convert these times between 24-hour time and digital:**

a 21:00 = ____ **b** 03:00 = ____ **c** 13:17 = ____

d 4:18 pm = ____ **e** 9:00 am = ____ **f** 11:35 pm = ____

3 **Answer the following questions based on this train timetable:**

Train timetable				
	Train 1	**Train 2**	**Train 3**	**Train 4**
Chasewood	9:00 am	9:40 am	10:08 am	10:52 am
East Village	9:15 am	9:55 am	10:23 am	11:16 am
Bridesford	9:45 am	10:40 am	11:06 am	12:07 am

a Which is the fastest train from Chasewood to Bridesford? _____

b If you needed to get to East Village by 10:00 am, which train would you get from Chasewood? _____

c What is the difference between the fastest and the slowest train from Chasewood to Bridesford? _____

Skills	Not yet	Kind of	Got it
• Matches analogue and digital clocks			
• Converts between 24-hour time and am or pm notation			
• Reads, interprets and uses timetables from real-life situations, including those involving 24-hour time			

Calculating time

Name _____

1 **Work out each equivalent length of time.**

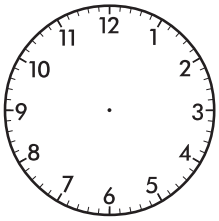
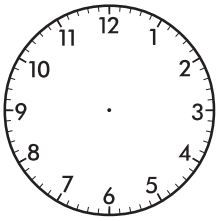
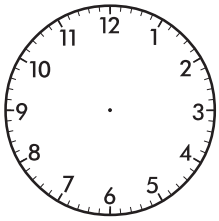
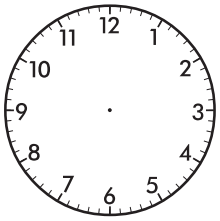
a 7 minutes ☐ seconds

b $1\frac{1}{2}$ hours ☐ minutes

c 2 non-leap years ☐ weeks

d 360 seconds ☐ minutes

2 **Complete these clocks to show the elapsed times:**

	45 minutes	22 minutes	65 minutes	20 minutes
Start	2:16	3:55	12:10	8:45
Finish				

3 **Read this elapsed time problem and use the timeline to work it out.**

Last Easter holidays, the Gilmore family got stuck in a traffic jam and were delayed. If they arrived at 5:52 pm and were due to arrive at 3:10 pm, how long were they delayed?

☐

3:10 pm + ____ = ☐

4 **Tick the faster time shown on the stopwatch.**

a ❑ 08:23:86

b ❑ 08:23:69

Skills	Not yet	Kind of	Got it
• Recognises time relationships			
• Can calculate elapsed times			
• Recognises a faster time on a stopwatch			

Timetables

Name _____

1 **How many days in each of these months in a non-leap year?**

a February ☐ **b** September ☐

c August ☐ **d** April ☐

2 **In 2010, James' birthday is on Thursday 13th of May. His sister Marnie has her birthday exactly 3 weeks after James and his best friend Will has his birthday 4 days after Marnie.**

May 2010						
M	T	W	T	F	S	S
31					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

June 2010						
M	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				

Using this calendar, work out the following:

a What date is Marnie's birthday? _____

b What day of the week is Will's birthday in 2010? _____

3 **Work out the missing times in these flight schedules if:**

- Kuala Lumpur is 8 hours ahead of London
- Sydney is 9 hours ahead of Cape Town

a

London to Kuala Lumpur 12 hours flying time	
Depart local time	Arrive local time
8 am	

b

Sydney to Cape Town 14 hours flying time	
Depart local time	Arrive local time
6 pm	

Skills	Not yet	Kind of	Got it
• Recalls how many days there are in certain months of the year			
• Uses a calendar for a real life purpose			
• Calculates time differences between major cities of the world in context			

Series G – Time – Student Progress Record

Name_____ Class _____ Date _____

What went well: _____

_____

_____

_____

What I need to improve: _____

_____

_____

_____

Series G – Time – Student Progress Record

Name_____ Class _____ Date _____

What went well: _____

_____

_____

_____

What I need to improve: _____

_____

_____

_____

Series G – Time

ASSESSMENT ANSWERS

Page 4

1a 8:22 pm

b 9:45 am

c 10:10 pm

d 4:58 am

2a 9:00 pm

b 3:00 am

c 1:17 pm

d 16:18

e 09:00

f 23:35

3a Train 1 (9:00 am)

b Train 2 (9:40 am)

c 30 minutes

Page 5

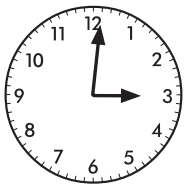
1a 420

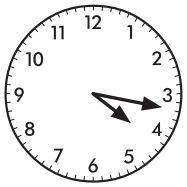
b 90

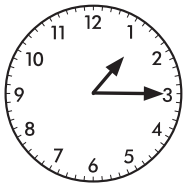
c 104

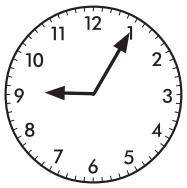
d 6

2









3 2 hours 42 minutes

3:10 pm + 2 = 5:10 pm

4 Tick **b** ☑

08:23:69

Page 6

1a 28

b 30

c 31

d 30

2a 3rd June

b Monday

3a 4 am

b 11 pm

Series G – Time

Topic	Reference	Strand	Objective
All	6M5	Measurement	Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places.
All	6M9	Measurement	Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.