Varied Fluency Step 1: Hours, Minutes and Seconds

National Curriculum Objectives:

Mathematics Year 4: (4M4c) <u>Solve problems involving converting from hours to minutes;</u> minutes to seconds; years to months; weeks to days

Differentiation:

Developing Questions to support conversions of hours, minutes and seconds in multiples of 10.

Expected Questions to support conversions of whole, half, quarter and multiples of 5 and 10 hours, minutes and seconds using two consecutive units of time, i.e. 5 hours and 35 minutes.

Greater Depth Questions to support conversions of mixed durations of hours, minutes and seconds using any two units of time and unconventional partitioning, i.e. 5 hours and 90 minutes.

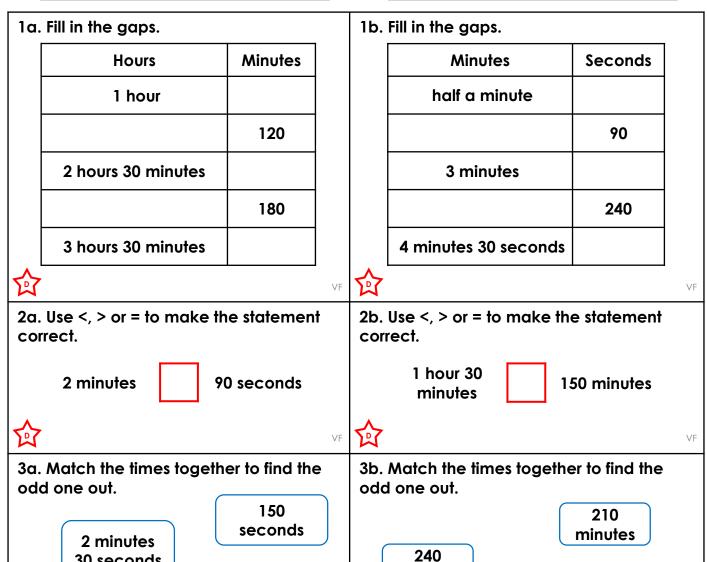
More **Year 4 Time** resources.

Did you like this resource? Don't forget to review it on our website.



Hours, Minutes and Seconds

Hours, Minutes and Seconds



4a. Which children were quicker in week 2?

230 seconds

30 seconds

| Name | Week 1 | Week 2 | |
|------|----------------------|---------------------|--|
| Jay | 1 minute | 30 seconds | |
| Tim | 180 seconds | 1 minute 30 seconds | |
| Aya | 3 minutes 30 seconds | 240 seconds | |
| | | | |

4b. Which child was quicker in week 1?

4 hours

VF

VF

minutes

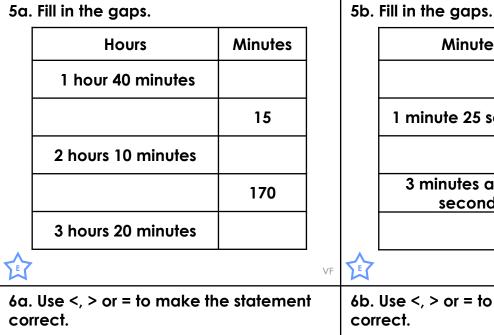
| Name | Week 1 | Week 2 |
|------|----------------------|-------------|
| Во | 1 hour 30 minutes | 120 minutes |
| Esa | 180 minutes | 2 hours |
| Ivan | 5 hours | 300 minutes |



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Hours, Minutes and Seconds

Hours, Minutes and Seconds



| Minutes | Seconds |
|--------------------------|---------|
| | 70 |
| 1 minute 25 seconds | |
| | 165 |
| 3 minutes and 40 seconds | |
| | 255 |

3 minutes 15 seconds

190 seconds

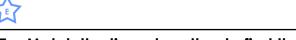
140

minutes

6b. Use <, > or = to make the statement

4 hours 30 minutes

270 minutes



7a. Match the times together to find the odd one out. 1 hour 40

seconds 100

minutes

125

2 minutes 5 seconds

minutes

7b. Match the times together to find the odd one out.

145 seconds 3 hours 30 minutes

105 seconds VF

VF

1?

1 minute 45 minutes seconds

8b. Which children were quicker in week

210

8a. Which children were quicker in week 2?

| Name | Week 1 | Week 2 | |
|------|-----------------------|-------------|--|
| Joey | 3 hours 5 minutes | 170 minutes | |
| Sam | 260 minutes | 4 hours | |
| Nyab | 5 hours 10 minutes | 305 minutes | |

| Name | Week 1 | Week 2 |
|---------|-------------------------|---------------------|
| Barney | 2 minutes 50 seconds | 180 seconds |
| Jibrail | 6 minutes | 275 seconds |
| Tia | 240 seconds | 4 minutes 5 seconds |

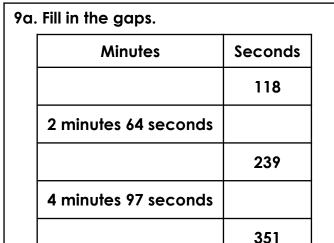




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Hours, Minutes and Seconds

Hours, Minutes and Seconds



9b. Fill in the gaps.

| Hours | Minutes |
|--------------------|---------|
| 3 hours 26 minutes | |
| | 288 |
| 5 hours 42 minutes | |
| | 399 |
| 7 hours 3 minutes | |





6 hours 56 minutes



10b. Use <, > or = to make the statement correct.

> 533 seconds



8 minutes 93 seconds



11a. Match the times together to find the odd one out. 332

3 hours 32 minutes

minutes

234 seconds

212 minutes

3 minutes 54 seconds

11b. Match the times together to find the odd one out.



seconds

4 hours 59 minutes

minutes

409

seconds

299

VF

VF



12a. Which children were quicker in week 1 and by how much?

| Name | Week 1 | Week 2 |
|------|-----------------------|-----------------------|
| Juno | 5 hours 37 minutes | 237 minutes |
| Mark | 6 hours 49 minutes | 419 minutes |
| lvy | 438 minutes | 7 hours 98 minutes |

12b. Which children were quicker in week 1 and by how much?

| Name | Week 1 | Week 2 |
|------|-------------------------|-------------------------|
| Rafi | 552 seconds | 9 minutes 88 seconds |
| Jim | 8 minutes 26 seconds | 516 minutes |
| Erin | 574 seconds | 9 minutes 54 seconds |





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Varied Fluency Hours, Minutes and Seconds

<u>Varied Fluency</u> Hours, Minutes and Seconds

<u>Developing</u>

la.

| Hours | Minutes |
|--------------------|---------|
| 1 hour | 60 |
| 2 hours | 120 |
| 2 hours 30 minutes | 150 |
| 3 hours | 180 |
| 3 hours 30 minutes | 210 |

2a. >

3a. 230 seconds 4a. Jay and Tim

Expected

5a.

| Hours | Minutes |
|--------------------|---------|
| 1 hour 40 minutes | 100 |
| quarter of an hour | 15 |
| 2 hours 10 minutes | 130 |
| 2 hours 50 minutes | 170 |
| 3 hours 20 minutes | 200 |

6a. >

7a. 140 minutes

8a. All three children

Greater Depth

9a.

| Minutes | Seconds |
|----------------------|---------|
| 1 minute 58 seconds | 118 |
| 2 minutes 64 seconds | 184 |
| 3 minutes 59 seconds | 239 |
| 4 minutes 97 seconds | 337 |
| 5 minutes 51 seconds | 351 |

10a. <

11a. 332 minutes

12a. Mark – week 1 by 10 minutes;

Ivy - week 1 by 80 minutes.

Developing

Ib.

| ١. | Minutes | Seconds |
|----|----------------------|---------|
| | half a minute | 30 |
| | 1 minute 30 seconds | 90 |
| | 3 minutes | 180 |
| | 4 minutes | 240 |
| | 4 minutes 30 seconds | 270 |

2b. <

3b. 210 minutes

4b. Bo

Expected

5b.

| Minutes | Seconds |
|--------------------------|---------|
| 1 minute 10 seconds | 70 |
| 1 minute 25 seconds | 85 |
| 2 minutes 45 seconds | 165 |
| 3 minutes and 40 seconds | 220 |
| 4 minutes 15 seconds | 255 |

6b. =

7b. 145 seconds

8b. Barney and Tia

Greater Depth

9b.

| Hours | Minutes |
|--------------------|---------|
| 3 hours 26 minutes | 206 |
| 4 hours 48 minutes | 288 |
| 5 hours 42 minutes | 342 |
| 6 hours 39 minutes | 399 |
| 7 hours 3 minutes | 423 |

10b. <

11b. 649 seconds

12b. Rafi – week 1 by 76 seconds;

Jim - week 1 by 10 minutes;

Erin – week 1 by 20 minutes.