## Reasoning and Problem Solving Step 6: Comparing Time

## National Curriculum Objectives:

Mathematics Year 1: (1M1) Compare, describe and solve practical problems for time

## Differentiation:

Questions 1, 4 and 7 (Problem Solving)
Developing Find all of the possible statements using 2 out of 3 units of time and an inequality symbol. Units of time given in order. Numbers in multiples of 10.
Expected Find all of the possible statements using up to 3 out of 4 units of time and an inequality than symbol.
Greater Depth Find all of the possible statements using up to 3 out of 5 units of time and an inequality symbol. 2 units are equivalent.

Questions 2, 5 and 8 (Reasoning)
Developing Determine which children were faster or slower than the teacher in an event. Up to four instructions given using faster, slower, earlier or later. Numbers in multiples of 10. Expected Determine which children were faster or slower than the teacher in an event. Up to five instructions given using faster, slower, earlier or later.
Greater Depth Determine which children were faster or slower than the teacher in an event. Six instructions given using faster, slower, earlier and later and corresponding superlatives.

Questions 3, 6 and 9 (Problem Solving)
Developing Complete two sentences with the words faster or slower using a table of times. Two times compared. Numbers in multiples of 10.
Expected Complete two sentences using faster, slower, earlier or later using a table of times. Three times compared.
Greater Depth Write two sentences using faster, fastest, slower or slowest using a table of times. Three times compared.

## More Year 1 Time resources.

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

1a. Using two cards at a time, make as many correct statements as you can using these cards and a> symbol.


2a. Joe, Tom and Matty were making bird food. They wanted to see who could make their bird food faster than their teacher, Mr Hanson. They all started at the same time.

- Matty took 3 minutes.
- Joe finished last.
- Tom was faster than Matty.
- The teacher took 4 minutes.

Who made their bird food faster than the teacher? Explain your answer.


3a. Two children timed themselves on a jog around the park. Fill in the blanks to complete the sentences, using the words faster or slower.

| Name | Time (minutes) |
| :---: | :---: |
| Molly | 20 |
| Luke | 30 |

Luke jogged $\qquad$ than Molly.

Molly jogged $\qquad$ than Luke.

1b. Using two cards at a time, make as many correct statements as you can using these cards and a < symbol.


2b. Larry, Roy and Sarah were making paper planes. They wanted to see who could make their plane faster than their teacher, Mrs Knight. They all started at the same time.

- Mrs Knight took 50 seconds.
- Roy was faster than Larry.
- Sarah finished last.
- Larry took 40 seconds.

Who made their plane faster than the teacher? Explain your answer.
0
3b. Two children timed themselves singing the alphabet. Fill in the blanks to complete the sentences, using the words faster or slower.

| Name | Time (seconds) |
| :---: | :---: |
| Megan | 40 |
| Ben | 20 |

Ben sang $\qquad$ than Megan.

Megan sang $\qquad$ than Ben.

## Comparing Time

4a. Make as many correct statements as you can using up to 3 of these cards and a < symbol.


5a. Hamza, Pippa, Luke, David and Jenny were building towers. They wanted to see who could build the tower faster than their teacher, Mr Lee. They all started at the same time.

- Mr Lee took 43 seconds.
- Hamza took 49 seconds.
- Pippa and Luke were faster than David.
- David took 40 seconds.
- Three children finished earlier than the teacher.
Who built their tower faster than the teacher?
Explain your answer.

6a. Three children timed themselves walking from the classroom to the hall. They all started at the same time. Fill in the blanks to complete the sentences using faster, slower, earlier or later.

| Name | Time (minutes) |
| :---: | :---: |
| Holly | 43 |
| Kyle | 35 |
| Anna | 38 |

Kyle sang $\qquad$ than Anna. Anna finished singing $\qquad$ than Holly.

4b. Make as many correct statements as you can using up to 3 of these cards and a< symbol.


5b. Katie, Lara, Jake and Mark were making origami boxes. They wanted to see who could make their box faster than the teacher, Miss Smith. They all started at the same time.

- Miss Smith finished third.
- Katie and Lara were faster than Jake.
- Mark was slower than Jake.
- Lara finished earlier than the teacher.
- Jake finished fourth.

Who made their box faster than the teacher?
Explain your answer.

6b. Three children timed themselves on a bike ride. They all started at the same time. Fill in the blanks to complete the sentences using faster, slower, earlier or later.

| Name | Time (minutes) |
| :---: | :---: |
| Callum | 33 |
| Peter | 31 |
| Dee | 35 |

Callum finished the ride $\qquad$ than Peter. Dee rode $\qquad$ than Callum and Peter.

## Comparing Time

## Comparing Time

7a. Make as many correct statements as you can using up to 3 of these cards and a < symbol.


8a. Jack, Rick, Mary and Boe were doing a dot-to-dot. They wanted to see who could finish it faster than their teacher, Mr Henry. They all started at the same time.

- Mr Henry was faster than Boe.
- Jack took 62 seconds.
- Mary took 64 seconds.
- Two children were slower than the teacher.
- Boe was faster than Mary.
- Rick was the fastest.

Who finished their dot-to-dot faster than the teacher? Explain your answer.

6a. Three children timed themselves how long it took them to walk to school. Write two sentences using the words fastest, slowest, faster, slower, earlier, earliest, later or latest.

| Name | Time |
| :---: | :---: |
| Chez | 35 minutes |
| Ella | 36 minutes |
| Zoe | 34 minutes |

7b. Make as many correct statements as you can using up to 3 of these cards and a < symbol.

| 57 <br> minutes | three <br> hours | 60 <br> minutes |
| :---: | :---: | :---: |
| an hour | twelve <br> minutes |  |

8b. Carl, Meena, Lily, Jim and Terry were building sandcastles. They wanted to see who could build the sandcastle faster than their teacher, Miss Yang. They all started building at the same time.

- Meena finished first.
- Terry was the slowest.
- Jim took 63 seconds.
- Lily took a minute.
- Carl was slower than Miss Yang.
- Jim and Miss Yang finished at the same time.
Who built their castle faster than the teacher? Explain your answer.

6b. Three children timed themselves doing 20 star jumps. They all started at the same time. Write two sentences using the words fastest, slowest, faster, slower, earlier, earliest, later or latest.

| Name | Time |
| :---: | :---: |
| June | 59 seconds |
| Lou | 58 seconds |
| Kim | 53 seconds |

# Reasoning and Problem Solving Comparing Time 

## Varied Fluency Comparing Time

## Developing

1a. Various answers, for example: an hour > 10 seconds
2a. Tom and Matt finished faster than their teacher, because Mr Quinn finished in 4 minutes which is longer than Matty, who finished in 3 minutes and Tom was faster than Matty.
3a. Slower; faster

## Expected

4a. Various answers, for example: one second < five minutes or one second < 5 minutes < 27 minutes
5a. Luke, Pippa and David all built their tower faster than the teacher, because David took 40 seconds which was faster than Mr Lee, who took 43 seconds. We know that Pippa and Luke were faster than David so must have taken less than 40 seconds.
6a. Faster; earlier

## Greater Depth

7a. Various answers, for example: three seconds < 52 minutes or a minute < 52 minutes < two hours
8a. Jack and Rick were faster than their teacher, because we know that 2 children were slower than the teacher, which means 2 were faster. Mr Henry was faster than Boe, who was faster than Mary, which means they were the slowest and finished after Mr Henry.
9a. Various answers, for example: Zoe finished earliest or Ella jogged slower than Chez.

## Developing

1b. Various answers, for example: A
minute < 20 minutes
2b. Roy and Larry were faster than their teacher, because Mrs Knight finished in 50 seconds which is longer than Larry, who finished in 40 seconds and Roy was faster than Larry.
3b. Faster; slower

## Expected

4b. Various answers, for example: 15 minutes > 10 seconds or $3 \mathrm{hrs}>15$ minutes $>$ eighteen seconds
5b. Katie and Lara finished faster than their teacher because we know that there were 5 people making boxes, the teacher finished third, Jake, who came fourth, was slower than Katie and Lara, and Mark was slower than Jake.
6b. Later; slower

## Greater Depth

7b. Various answers, for example: 57 minutes < three hours or twelve minutes < an hour < 3 hours
8b. Lily and Meena were faster than their teacher, because Jim and Miss Yang took 63 seconds, Lily took a minute which is quicker, and Meena finished first which must have been the shortest time.
9b. Various answers, for example: Possible answers include: Kim finished earlier than Lou or June was the slowest.

