Week 14, Day 4

Units of time

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. Start by exploring the online Practical Activity.

It might also be helpful to watch this short video on <u>Introducing Time in the Early Years</u> from Prof. Ruth Merttens.



 Tackle the questions on the Practice Sheet.
 There might be a choice of either Mild (easier) or Hot (harder)!

Check the answers.

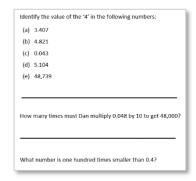


3. Finding it tricky? That's OK... have a go with a grown-up at A Bit Stuck?

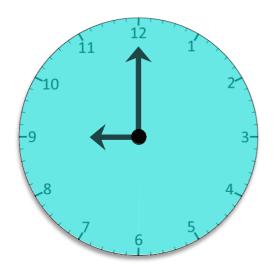


4. Have I mastered the topic? A few questions to **Check your understanding.**

Fold the page to hide the answers!



Practical activity Just a minute



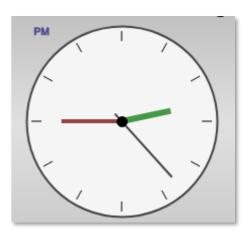
The minute hand on this clock takes **one hour** to move all the way round the clock. That's **60 minutes**.

We can measure how long we are asleep in **hours.**We can measure how long it takes to eat our dinner in **minutes**.

We can measure how long it takes to wash our hands in **seconds**.

Have a look at the clock here: http://clock.zone/analog . This clock has an hour hand, a minute hand AND a second hand.

Can you see the second hand moving? It moves every second. It takes one minute to move all the way around the clock: that's 60 seconds.



With an adult, choose one of these 5 activities and see how many you can do in a minute, i.e. before the second hand goes all the way round the clock.

- 1. How many times you can write your name.
- 2. How many times you can roll a 6 on a dice.
- 3. How many numbers you can write in a minute, beginning at 1.
- 4. How many days of the week you can write.
- 5. How many smiley faces you can draw.

One person acts as the timekeeper – watching the clock, telling you to start when the second hand is at the top, and then calling 'Stop' when one minute has passed.

Swap roles and repeat with a different activity.

Practice Sheet for All Hours, minutes or seconds

Would you measure these events in hours, seconds or minutes?



Hot Challenge

What are two more events that would be measured in seconds, two more in minutes and two more in hours?

© Hamilton Trust. Explore more Hamilton Trust Learning Materials at https://wrht.org.uk/hamilton

Practice Sheet Answers

Hours, minutes or seconds



Some of these events will promote discussion because there is more than one possible answer.

Hot Challenge

What are two more events that would be measured in seconds, two more in minutes and two more in hours?

e.g. In seconds: The time to run 100m or to put on your shoes.

In minutes: The time it takes to boil an egg or the length of play time at school.

In hours: The time you are asleep at night or the length of a

Toy Story film.

A Bit Stuck? Countdown

Work in pairs

Things you will need:

Timer or mobile phone



What to do:

- Ask an adult to set the timer on a mobile phone to 10 seconds.
- Press start. Say 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0 as it counts down.
- Repeat a few times so that you get used to the speed of the count down.
- Now repeat, but closing your eyes!
- Ask the adult to say how close you were.
- Repeat to see if you can get any closer.
- Now try counting to 20...
- Can you time 20 seconds by counting?





Which of these do you think you could do in less than 20 seconds?

- Build a Lego™ house.
- Eat a biscuit (or two...)
- Read a page of a book.
- Say red lorry, yellow lorry three times





S-t-r-e-t-c-h:

Think of something else you could do in less than 20 seconds.

Think of something else which would take longer.

© Hamilton Trust. Explore more Hamilton Trust Learning Materials at https://wrht.org.uk/hamilton

Check your understanding Questions

What unit of time would be used to measure how long it takes to....

- 1. Read a picture book?
- 2. Jump up and down three times.
- 3. Wait for your next birthday.
- 4. Run the length of the playground.
- 5. Become a teenager.

Which of these do you think can be done in less than a minute?

- 1. Eat a banana.
- 2. Write your name 100 times.
- 3. Write numbers 1 to 10.
- 4. Sing 'head, shoulders, knees and toes', with actions, three times.

Fold here to hide answers

Check your understanding Answers

What unit of time would be used to measure how long it takes to....

- 1. Read a picture book? Minutes.
- 2. Jump up and down three times. Seconds.
- 3. Wait for your next birthday. Months/days depends when it is.
- 4. Run the length of the playground. Minutes/seconds depends on length and your speed.
- 5. Become a teenager. Years.

Which of these do you think can be done in less than a minute?

- 1. Eat a banana.
- 2. Write your name 100 times.
- 3. Write numbers 1 to 10.
- 4. Sing 'head, shoulders, knees and toes', with actions, three times.

Answers may vary, but activities 1 and 3 should be possible...