Diving into Mastery - Diving

## Adult Guidance with Question Prompts

## Hours, Minutes and Seconds

Pupils should understand that seconds pass quicker than minutes and that minutes are quicker than hours. They should be able to read the digital display of a stopwatch and identify how many hours, minutes and seconds have passed.

Which is longer/shorter: hours, minutes or seconds? How do you know?

What is a stopwatch used to measure?
How can you tell the difference between the numbers that represent hours, minutes and seconds on the display?

How many hours, minutes and seconds does it show?
Do you think $\qquad$ is a quick or short activity? Why?

Would it take hours, minutes or seconds to complete?
Can you think of a task that would take hours/minutes/seconds to complete?

## Stem Sentences

- The stopwatch shows $\qquad$ hours, $\qquad$ minutes and $\qquad$ seconds.
-Ithink $\qquad$ would take hours/minutes/seconds to complete because...

Hours, Minutes and Seconds
Fill in the missing numbers to match the stopwatch.


Would you measure these activities in seconds, minutes or hours? Circle the correct word.

| make toast | seconds | minutes | hours |
| :--- | :--- | :--- | :--- |
| sleep at night | seconds | minutes | hours |
| blow out candles seconds | minutes hours |  |  |

## Can you think of different

 tasks that take seconds, minutes or hours to complete?
## Diving into Mastery - Deeper

Adult Guidance with Question Prompts
Hours, Minutes and Seconds

## Hours, Minutes and Seconds

Pupils will use and apply their understanding of the duration of hours, minutes and seconds to explore misconceptions and to mathematically reason.
Look at the pictures of the bread and cake. How long does it take to make a loaf of bread/a cake?

Which would take more time? How do you know?
If the bread takes more time to make, does this mean it is quicker or slower to make than the cake? Explain your answer.
Is Sol correct? Why?
Do you agree or disagree with Meg? Explain why.
Which unit of time would you choose to measure the time taken to watch a film? Explain why.

What is different about minutes and seconds?
Which is quicker?
Stem Sentences
I agree/disagree with $\qquad$ because...

## Do you agree with Meg?



Diving into Mastery - Deepest
Adult Guidance with Question Prompts

## Hours, Minutes and Seconds

Pupils need to work in pairs to operate and read a stopwatch. They will need a stopwatch, a lace, 10 beads, a whiteboard and a pen to complete this activity. They must use the stopwatch to measure each other completing the activities and record the times on the table.

Can you start/stop/read/clear the time on the stopwatch?
Where on the table do you write both your names?
Where do you record how long it took for you/your partner to $\qquad$ ?

How long did it take you to run one lap of the playground?
Who was quicker at threading beads? How much quicker?
Who took longer to write their name?
How long did it take?
Can you think of an activity that will take longer to complete than these activities?

## Stem Sentences

__ was quicker/slower at $\qquad$
It took $\qquad$ minutes and $\qquad$ seconds to $\qquad$

Hours, Minutes and Seconds
Use a stopwatch to time yourself and your partner. Write the times on the table.

| Name | Run 1 Lap <br> of the <br> Playground | Thread 10 <br> Beads | Write Your <br> Name |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |

How long did it take you to run 1 lap of the playground?

Who was quicker at threading beads?

Who took longer to write their name?

Can you think of an activity that will take longer to complete than these activities?


