## Investigate: How does exercise effect our heart rate?



Our heart rate is the number of times our heart beats per minute. We need to discover what happens to our hearts when we exercise.


## How can we do this?



## We'll need to record our heart beats. How can we do this?

- Listen to our heart beating in our chest
- Listen to our pulse in our wrist
-Listen to our pulse in our neck



## How can we record this information?

## In a table, graph or chart.



## How can we make it a fair test?


-We'll need to count our heart beats before, during and after exercise.
-We'll need to do this over the same amount of time e.g. how many heart beats in 10 seconds?
-We'll need to use a stopwatch to make sure we're accurate.


## How about something like this?



| Number of heart beats in 10 seconds |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 30 |  |  |  |  |
| 29 |  |  |  |  |
| 28 |  |  |  |  |
| 27 |  |  |  |  |
| 26 |  |  |  |  |
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| 8 |  |  |  |  |
| 7 |  |  |  |  |
| 6 |  |  |  |  |
| 5 |  |  |  |  |
| 4 |  |  |  |  |
| 3 |  |  |  |  |
| 2 |  |  |  |  |
| 1 |  |  |  |  |
|  | Resting | Warm up | Exercise | Cool Down |

I can time my heart beats when I'm resting, after our warm up, after our exercise, and then after our cool down. I can colour the blocks to show how many times my heart beats in ten seconds each time.

| Movement |  | Person 1 | Person 2 | Person 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | Heart rate before |  |  |  |
|  | Heart rate during |  |  |  |
|  | Heart rate after |  |  |  |
|  | Heart rate before |  |  |  |
|  | Heart rate during |  |  |  |
|  | Heart rate after |  |  |  |
| Skipping | Heart rate before |  |  |  |
|  | Heart rate during |  |  |  |
|  | Heart rate after |  |  |  |

Or you can use something like this if you would like to compare heart rates between people. Remember to cool down completely after each movement!

## I wonder if I can predict what will happen to my heart rate?



It's always good to predict - what do you think will happen to your heart with exercise? Record your predictions then you can see if you were right after your investigation!


After recording your findings in a table, discuss what you can conclude. What happens to our heart rate with exercise? What happens when we rest? What happens to our bodies? Why does this happen?


## I want you to investigate your heart rates! Let's exercise and investigate!



