## Pulse


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## Engage

Discuss the pulse/heartbeat in different situations.
Answer the questions.

1. How can you influence your pulse/heartbeat?
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$\qquad$
2. How can you get a higher pulse /heartbeat?
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$\qquad$
$\qquad$
3. Is there a difference when children do sports (eg twice a week)?
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$\qquad$
$\qquad$
4. Is there a difference between boys and girls?
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$\qquad$
$\qquad$

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Investigate

1. How are we going to find out the correct answers?
2. How can you conduct such an experiment?

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## How can we measure time?

We have a problem when we want to conduct the experiments... We need to measure the time. How are we going to manage this?

Write down which measurement tools that exists.
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## Conclude

1. Gathering data

- Start by estimating your friends pulse (fill in the chart)
- in rest
- immediately after an activity
- one minute after activity
- Now use the self-made measurement tool and measure the pulse in these three different situations. Fill in the results in the chart.
- Which activity will we do to augment the pulse?
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$\qquad$
- Recuperation needs to be measured too.

| Name: | boy/ <br> girl | Sport/ <br> No <br> sport | Estimate <br> heartbeat in <br> rest. | Measure <br> heartbeat <br> in rest. | Estimate <br> heartbeat <br> immediately <br> after an <br> activity. | Measure <br> heartbeat <br> immediately <br> after an <br> activity. | Estimate <br> heartbeat <br> one minute <br> after <br> activity. |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  | Measure <br> heartbeat <br> one minute <br> after <br> activity. |  |  |  |
|  |  |  |  |  |  |  |  |  |
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Graph:
heartbeat in rest / immediately after an activity / one minute after activity


Discuss in your group what is typical for your data.
Write down below:
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Average pulse for all boys (in rest).

Average pulse for all girls (in rest).

## Conclusion?

Average pulse of all no-sporters.

1) In rest
2) Immediately after activity
3) After 1 minute

Average pulse of all sporters.

1) In rest
2) Immediately after activity
3) After 1 minute

## Conclusion?



## Plan

and


## Create

How can we make a measurement tool on our own in order to measure the pulse/heartbeat?

Make a drawing of your measurement tool:


## Report

Now let's evaluate all the work done.
Report about positive aspects of this project and the less positive and explain your dificulties during all the process...
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