**Lesson Overview**

**What happens to your heart when we exercise?**

| **AOLE: Science and Technology** |
| --- |
| **4 Purpose:** **ambitious, capable learners** |
| **WM:** Being curious and searching for answers is essential to understanding and predicting phenomena**.** | **DL:** I can identify questions that can be investigated scientifically and suggest suitable methods of inquiry.I can suggest conclusions as a result of carrying out my inquiries.I can evaluate methods to suggest improvements. |
| **LO:** |
| **Intro:** Discuss:What is our heart?What does it do?Why do we need to keep it healthy?One of these may be suitable to set the scene:[Operation Ouch! – Science Live Lesson - BBC Teach](https://www.bbc.co.uk/teach/live-lessons/articles/zp3r8p3)<https://www.youtube.com/watch?v=GMBSU-2GK3E>[KS2 Science: How our circulatory system keeps us alive - BBC Teach](https://www.bbc.co.uk/teach/class-clips-video/articles/zhf76v4#:~:text=You%20can%20find%20out%20your,higher%20or%20lower%20than%20that). Our heart rate changes as we do different activities throughout the day and to keep our heart healthy we must exercise it regularly like any other muscle. |
| **Main:** follow one of the investigations below or use XL Wales workshops or set up your own version to:* measure and record your heart rate when resting
* exercise for a set time
* repeat the measurements and record
* vary the intensity of exercise to see what effect it has on your pulse

[Heart Rate Investigation for Kids](https://www.science-sparks.com/heart-rate-investigation/)[Heart Rate Activity (teacher made) - Twinkl](https://www.twinkl.co.uk/resource/ca2-sc-29-heart-rate-activity)[Heart Rate Investigation](https://www.stem.org.uk/resources/elibrary/resource/479984/heart-rate-investigation). |
| **Plenary:** Can you come up with one sentence to describe what happens to your heart when you exercise using vocabulary that you have learnt in this unit?**Extension:**Can you convert your measurements into a graph? |
| **Useful links:** **XL Wales:** excellent workshop on measuring your heart rate (no website but you can contact Julie via Facebook)**Links to other units:**Boxing fitnessBoxing circuitsboxing skipping |