



Fy nhaith ddysgu yn Ngwyddoniaeth/Thechnoleg/TGCh

My learning journey in **Science** and Technology/ICT



Uned ymholi/Enquiry unit: *Do you have what it takes to be a **Sports Scientist**?*

Gwybodaeth a dysgu blaenorol/Prior knowledge and learning:

Previously, you will have studied the role of different organs and organ system that enable animals to live and grow as well as identifying some of the threats to the development and health of organisms. You would have also described the impacts of science and technology, past and present, in your everyday life.

Yn ystod eich taith mi fyddwch yn ...

During your journey you will ...

- Explore different careers within STEM, including discovering the desirable skills and attributes of a Sports Scientist
- Identify the functions of the human skeleton
- Recognise key bones and muscle groups
- Outline benefits of exercising on both our physical and mental wellbeing, and distinguish between short and long term effects of exercise
- Describe the key organs within the circulatory, respiratory and digestive systems
- Compare aerobic and anaerobic respiration
- Explain how our respiratory system is adapted for gaseous exchange
- Compare and contrast how inspired air is different to expired air
- Evaluate the effect of smoking, vaping or drugs on an athlete's body

Yr ydym ar y daith hon oherwydd ...

We are on this journey because ...

- There are amazing career pathways and future opportunities for all of us in STEM
- With the average human body containing over 37.2 trillion cells, over 650 muscles and over 100,000 miles of blood vessels, it truly fascinating to find out everything that is going on inside ourselves!
- It is important for us to understand how our bodies work and use models to help us grasp abstract concepts that we are unable to physically touch or see.
- As healthy, confident individuals, it is important that we can apply knowledge about the impact of diet and exercise on physical and mental health in our daily lives.
- As ambitious, capable learners we are learning to use digital technologies to creatively communicate, find and analyse information.

Eich tasgau/Your tasks:

Tasg/k 1: **Summative Assessment:** Pre and post topic quiz

Tasg/k 2: **Home Learning Task:** Musculoskeletal Creative Challenge

Tasg/k 3: **Practical Skills:** Heart Rate & Exercise Investigation

Tasg/k 4: **Creative Assessment:** Careers Focused Task

