



What's your body hiding - science or superpowers?

You might not shoot webs or lift buildings, but your body has built-in superpowers you've never measured... until now.

In this hands-on investigation, students become movement scientists using **real-time wireless data logging** to explore how their bodies respond to exercise. By measuring changes before and after movement, they'll learn how to observe, record and *decode their own biological brilliance*. What's powering their inner superhero? Let's find out.

Curriculum Links

Australian Curriculum v9: Year 7 – Biological Sciences + Scientific Inquiry

AC9S7U01

Cells work together in systems to support life in multicellular organisms

AC9S7I03

Identify patterns and relationships in data using evidence

AC9S7H01

Explore how science supports personal and community wellbeing

Activity Idea:

Decode Your Own Superpowers. A Movement Investigation

Theme link: Decoding change through observation and pattern recognition

You'll need:

- ☐ Wireless Data Logging Starter Kit
- ☐ Printable student worksheet (below)
- ☐ Stopwatch (optional)
- ☐ Open safe space for light movement (e.g. jogging in place, star jumps)
- ☐ Whiteboard or notebook for results and pattern spotting

1

Students act as body system investigators, using sensors from the **Wireless Data Logging Kit** to track what changes when they move such as skin temperature, motion or posture.

2

They start by collecting baseline data, then complete light physical activities and compare the results.

3

Students identify patterns and explain how internal systems like the muscular, respiratory and circulatory systems work together during exercise. It's a confidence-boosting introduction to scientific inquiry through self-discovery.

Extend

Students create their own "superpower profile" or comic-style infographic based on their results, highlighting the strengths of their unique body responses.

Decode Your Own Superpowers

A Movement Investigation

Your mission

You don't need super strength or x-ray vision to be powerful. Your body is already doing amazing things every time you move. In this investigation, you'll use scientific tools to track what happens inside your body when you exercise. You'll collect data, look for patterns and uncover how your internal systems help you respond, recover and thrive.

Materials

- ☐ Wireless Data Logging Starter Kit (e.g. temperature or motion sensor)
- ☐ Stopwatch (optional)
- ☐ Worksheet or notebook
- ☐ Open space to move around safely
- ☐ A curious, energetic mind!

Step-by-step

- 1 Record your body's resting data (before exercise).
- 2 Do 30–60 seconds of light movement (e.g. star jumps, jogging in place).
- 3 Record your body's data again (after exercise).
- 4 Repeat the test if needed for accuracy.
- 5 Reflect on what changed and why.

My superpower data

Trial

Activity Type

Before Exercise

After Exercise

**What did
you decode?**

**What changed in your
body after you moved?**

**What do these changes
tell you about how your
body works?**

**Which systems (e.g.
muscular, circulatory,
respiratory) helped you
move and recover?**

**What was the most
surprising thing you
noticed?**

**If you could test another
factor next time, what
would it be and why?**

Extension challenge (Optional)

Create your own 'Superpower Profile'! Based on your results, write a comic-style description of how your body responds to movement. Are you built for speed? Balance? Fast recovery? Use creative names and diagrams to describe your internal powers.