# Reducing Our Carbon Footprint – Maths and Science – Years 5 & 6 – Student Worksheet

## Thought starter: What is a Carbon Footprint and how is it measured?

In Lesson 1, we looked at CO2 in the atmosphere by using the measurement ‘Parts per Million’ – or the percentage of gas in the atmosphere. Now, however, we’re going to measure CO2 in a different way. This will allow us to look at the amount of CO2 produced by each of us – as individuals, and within our families or our households.

### **The Weight of Greenhouse Gas**

**1.**Watch as your teacher and the class measure three different substances. Record the different masses (or ‘weights’) of each of these substances, even though they are all filling up a container to the volume of exactly 1 Litre (by the way, this is the same as saying a capacity of 1000 cm3).

|  |  |  |
| --- | --- | --- |
| **Substance 1:** | **Substance 2:** | **Substance 3:** |
|  |  |  |

What do you notice? What do you wonder?

Write down the reasons for the different masses of these three substances, even though they’re the same volume.

**2.**As a class, we’ll watch a second short clip from the new film ‘2040’.

[A person standing in front of a building

Description automatically generated](https://vimeo.com/showcase/6167669/video/336504721)

[What’s Your 2040 – For Energy?](https://vimeo.com/showcase/6167669/video/336504721" \t "_blank) **Password: 2040\_EDU**(https://vimeo.com/showcase/6167669/video/336504721)

After you have viewed this, take a few minutes to complete the table below.

|  |  |  |
| --- | --- | --- |
| **CONNECT:**  What information or ideas shown in this video are connected to or remind me of what I already know about carbon dioxide? | **EXTEND:** What new ideas or information presented here extend my existing knowledge about carbon dioxide? | **CHALLENGE:** What problems, issues or wonderings have popped into your mind as a result of watching this video clip? |
|  |  |  |

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### **Reflection**

Use the space below to write in three (3) important ideas that you will take away from this lesson:

1.

2.

3.