

2040 - The Seaweed Solution



Name _____

Class _____

Teacher Preparation

Learning intentions:

Students will...

- understand what fractions, decimals and percentages are
- understand simple ratios
- learn how seaweed farming can help reduce CO₂ emissions and therefore help combat climate change
- understand the relationship between seaweed farming, the health benefits of eating seaweed and climate change

Success criteria:

Students can...

- solve connect fractions, decimals and percentages and carry out simple conversions
- find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies
- recognise and solve problems involving simple ratios
- develop an infographic that uses numbers to convince peers to eat more seaweed



Make the learning intentions and success criteria visible to students throughout this lesson.

Teacher content information

A 2018 study by The University of Melbourne on the thoughts and concerns of young people from Generations X and Y found the number one concern across both groups was lack of action around climate change. In particular, "Generation X worries what climate change will mean for their own children, while Generation Y is concerned about the impact on future generations" ([The Educator](#)). The report indicates that young people have a serious mistrust in the Government's ability or willingness to tackle climate change.

Tackling climate change requires large-scale, systemic changes across all aspects of society. Simply aiming to reduce our CO₂ emissions is not enough: we need to rapidly decarbonise our planet. While this might sound challenging, the good news is we already have the knowledge and tools to do it.

2040 is an innovative feature documentary that looks to the future while focusing on what is happening now. Award-winning director Damon Gameau (director of [That Sugar Film](#)) embarks on a journey to explore what the future could look like by the year 2040 if we simply embraced the best solutions already available to us to improve our planet.

The film will demonstrate to your students that we already have the solutions to climate change; we just need to take action to bring them rapidly into the mainstream. The 2040 documentary and curriculum package will support your students in turning this knowledge into positive action for a better future.

You can make a group booking for your class at your local cinema during the film's theatrical release. These lessons have been designed with a media library to support teachers. The Schools Version includes an educational license, allowing you to play it in class as a learning tool or even host on-site screenings for your school community.

The film is the entry point to a global impact campaign that seeks to mobilise audiences to learn about, contribute to, advocate for and invest in regenerative solutions that improve the wellbeing of the planet, all people and all living systems.

To join the Regeneration and share your vision for 2040, see the [website](#).

Watch the 2040 trailer:



2040 - Official Trailer Password: 2040_EDU

Cool.org, GoodThing Productions and Regen Pictures would like to acknowledge the generous contributions of [Good Pitch Australia](#), [Shark Island Institute](#), [Documentary Australia Foundation](#), [The Caledonia Foundation](#) and our philanthropic partners in the development of these teaching resources.

A word on seaweed and carbon pollution: The impact of carbon pollution can be seen in increased rainfall, changing and unpredictable seasons, shrinking sea ice, rising sea levels, and warmer and more acidic oceans. These changes have, and will continue to:

- destroy sensitive animal habitats (especially in the seas) - e.g. coral bleaching
- play havoc with climate-sensitive diseases which pose a threat to human health
- worsen existing health conditions due to air pollution
- affect forestry, energy, mining, and farming which in turn affect our food supply and food quality
- increase the frequency, intensity, and impact of some types of extreme weather events.

What can we do about it? Seaweed farming has been recognised as an effective way of removing carbon from the atmosphere and tackling climate change. Check out this [Illustrated Guide to Seaweed Farming](#) to learn more about this - it will be used with your students in the lesson.

References:

- [What is Climate Change?](#) National Geographic Kids
- [Global Warming's Evil Twin: Ocean Acidification](#) The Climate Reality Project

These lessons have been created in partnership with

2040, Good Thing Productions

