# Fierce Earth – World’s Driest Place

**ABC ME screening details: Monday** 1 June, 2020 at 12:45pm

This episode can also be viewed on [ABC iView](https://iview.abc.net.au/show/fierce-earth) after the scheduled screening time.

**Key learning areas:** Geography, Science

**Level:** Secondary

**About:** In this episode the team travel 6000 miles to the country of Chile and the Atacama Desert - officially the driest place in the world. Leo skydives out of a plane to reveal why the air is so dry.

## Before the episode

1. Write your own definition of a desert.
2. How often does it rain where you live?

## During the episode

1. During the episode, three ‘dry facts’ are identified which explain the low rainfall in the Atacama desert. Use the table below to record the details of each.

|  |  |  |
| --- | --- | --- |
| Dry fact 1 | Dry fact 2 | Dry fact 3 |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. What has caused the ‘ghost towns’ of Chile?
2. Explain what Marisol’s town has done to ensure there is enough water for its population
3. As Leo attempts to cross 15km of the Atacama desert, what items does he take with him, are they sufficient and how do they help him to travel across the space?
4. What are the three survival tips that Leo gives for travelling in the desert
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. How have local communities managed to capture the moisture in the fog to provide a reliable water supply? Use the space below to draw an annotated diagram.

## After the episode

1. Use the information gathered in the table during the episode to write a structured paragraph explaining why there is so little water in the Atacama Desert.
2. How is the lack of moisture in desert air advantageous to scientists studying astronomy?

**Follow-up activity:** Australia is covered by large areas of desert. Research Australia’s driest places and identify their annual rainfall. Aboriginal peoples have lived in the driest parts of Australia for thousands of years. Find out how they accessed water in these spaces.

# NSW teacher notes

This is an optional standalone resource that could supplement student learning. The activities align with syllabus outcomes across stages and can be modified to meet the needs of your students. Students can complete the activities while learning at home and in the classroom. All activities can be completed without access to the internet or a device. Teachers could collect student work to offer feedback and as evidence of learning.

## Learning intentions

* To examine the factors which determine the availability of water in desert environments
* Discuss the ways that people have applied technology to overcome the limitations of their environment.

## NSW Geography K-10 Syllabus outcomes

|  |  |
| --- | --- |
| Stage 4 | Stage 5 |
| **GE4-1** locates and describes the diverse features and characteristics of a range of places and environments | **GE5-1** explains the diverse features and characteristics of a range of places and environments |
| **GE4-3** explains how interactions and connections between people, places and environments result in change | **GE5-3** analyses the effect of interactions and connections between people, places and environments |

## NSW Science 7-10 Syllabus outcomes

|  |  |
| --- | --- |
| Stage 4 | Stage 5 |
| **SC4-2VA** shows a willingness to engage in finding solutions to science-related personal, social and global issues, including shaping sustainable futures | **SC5-2VA** shows a willingness to engage in finding solutions to science-related personal, social and global issues, including shaping sustainable futures |
| **SC4-7WS** processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions | **SC5-7WS** processes, analyses and evaluates data from first-hand investigations and secondary sources to develop evidence-based arguments and conclusions |

[NSW Geography K-10 Syllabus](https://www.educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/hsie/geography-k-10) and [NSW Science 7-10 Syllabus](https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/science/science-7-10-2018) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales 2015 and 2018. See the [NESA website](https://educationstandards.nsw.edu.au/wps/portal/nesa/mini-footer/copyright) for additional copyright information.