

Climate Change Challenge

Rising Seas and Cities

Teaching Guide for Session Three

INTRODUCTION

As the Earth's temperature has warmed due to climate change, the northern and southern polar ice caps have begun to melt at an alarming rate. Because of this, some of the Earth's coastal regions are at risk from looding, while others could be entirely submerged by water. Though some parts of the world may not be directly threatened by rising sea levels, they can be indirectly impacted by changes in weather patterns that will occur as a result of changing oceans. This session informs children about the impacts of global warming on water levels and the man-made environment. Venice, a city built on water that has long struggled with loods and sinking, will be the reference. The session will explore Venice in order to introduce design concepts that builders, architects and engineers have turned to protect at risk regions from sea level rise. Children will be encouraged to envision and share their own solutions to protect buildings from Íooding.

IN THE PLAYSHOP

Listen: Read Aloud Text 1 (approx. 30 minutes)

Educators can begin the session with a read aloud of the suggested text, or another best suited to the participants' age group to introduce session concepts (see the read-aloud link provided on the website). Facilitate rich responses and discussions by encouraging participants' questions, observations, and personal connections, and/or by using guided prompts.

Suggested Text

Thomas, Kellie, and Belle WuthrichRising Seas: Flooding, Climate Change and Our New World. Richmond Hills: Firey Books Limited, 2018.

Rising Seais another non-Éction text that is both fascinating and disconcerting—eÂectively conveying a sense of urgency to young readers about rising sea levels. One interesting aspect of the book is that the factual information it presents covers a variety of di Âerent countries, areas, and cultural landmarks. Furthermore, it shows how many di Âerent places on the Earth will be aÂected by Íooding in the near future.

The writing is fact-focused and number heavy, which will not suit young readers but might appeal to older ones. Because the book is aimed at an older audience (9-13 years old) it can be used to impart a sense of urgency without being alarmist. An important addition to the text is that it o Âers solutions that may counter some of the distressing realities it presents.

2 View: Animation Video

(approx. 3 minutes)

Playshop Have the students watch the animation video of the session. This video is used to facilitate the communication of the core topics of the session.