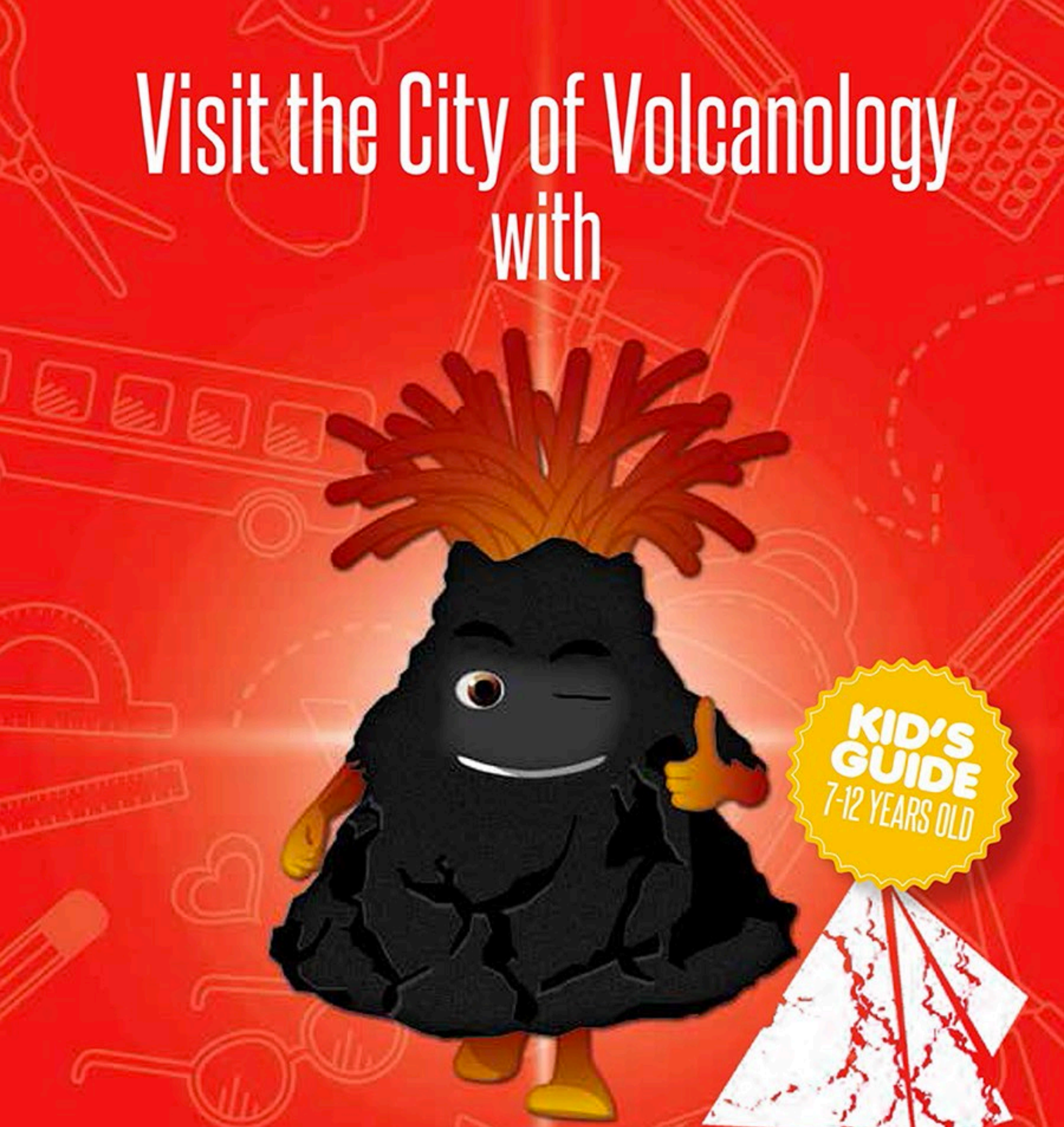
Visit the City of Volcanology with



Ti'Krator

Région Réunion
www.regionreunion.com

La Cité du Volcan

Réunion des Musées Régionaux

GENERAL MAP SITE

INDEX

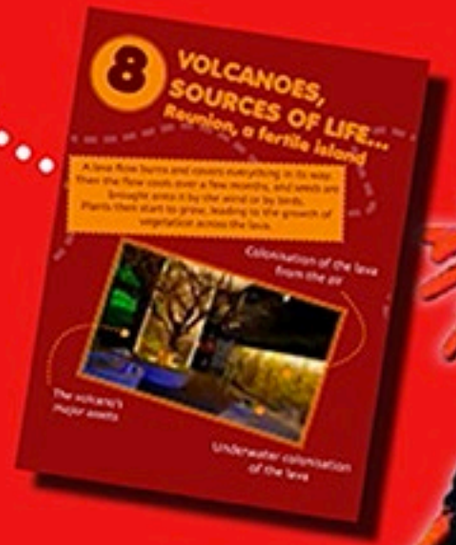
Central pull-out pages :
Museographic plan
Cut-out your own volcano

Hi, my name's **Ti'Krator !**
Welcome to
the City of Volcanology !

In your guide you'll find:
- a map of the City of Volcanology
- information about the different areas
- and lots of fun games too!

Follow the colours and numbers for each building shown on the pull-out map in the centre pages of your guide, and learn all about them as you read.

Be careful, the screens
and exhibition panels are fragile!
Please don't lean on them when writing!
There are benches you can use in
the different rooms.



To help you during your visit, why not use the pull-put map which can be found in the centre pages of your guide.

Are you ready?
Let's start the visit !

1 THE LAVA TUNNEL

Lava is high-temperature molten rock which flows down the slopes of Piton de la Fournaise when it erupts. When a lava flow cools, it solidifies and turns to rock.

Lava edges

Droplets of lava hanging from the roof of a tunnel (**stalactites**)

2 THE HALL

Scientists who study volcanoes are called **volcanologists.**

Maurice and Katia Krafft were the two volcanologists who first had the idea to create the City of Volcanology.

3 THE PANORAMIC FILM

A volcano is an opening in the ground through which magma reaches the surface. There are volcanoes on Earth, but also on other rocky planets across the Solar System: Mercury, Venus and Mars.

Come and check out this great film about the history of the Solar System!

4 WALKING ON A VOLCANO
Earth, a living planet

In this room you will learn all about **extra-terrestrial volcanoes and the earth's structure**, as well as **the different types of eruption.**

Complete this diagram with the following labels :

lava flow / volcanic pipe (or dyke)
eruptive fissure / magma chamber
lava fountain / volcanic cone

5 FLOWS, FOUNTAINS, VOLCANIC BOMBS...
Reunion, a volcanic island

When a volcano erupts it ejects lava which varies in size : very fine **ash**, **lapilli**, and **volcanic bombs**. Some bombs are even bigger than cars!

These bombs sometimes have funny names, such as 'cowpat', 'bread-crust' and 'cauliflower'...

The formation of Reunion Island

Volcanic rocks

6 LIVING ON A VOLCANIC ISLAND
Reunion, an island which is constantly evolving

It is sometimes dangerous living on a volcano as the eruptions can cause a lot of damage. Landslides or rockfalls can destroy whole villages.

Gravity-related risks :
landslides and rockfalls

Volcano-related risks :
lava flows and ejection,etc.

7 UNDERWATER VOLCANISM
The submersible

When lava reaches the sea, it cools very quickly and settles in cushion-shaped forms called '**pillow lavas**'. A few weeks after the end of the eruption, small animals and sea plants start to colonize the lava.

The submersible will take you down to discover the underwater slopes of Piton de la Fournaise!

8 VOLCANOES, SOURCES OF LIFE...
Reunion, a fertile island

A lava flow burns and covers everything in its way. Then the flow cools over a few months, and seeds are brought onto it by the wind or by birds. Plants then start to grow, leading to the growth of vegetation across the lava.

Colonisation of the lava from the air

The volcano's major assets

Underwater colonisation of the lava

9 THE TREASURE TROVE
Stone museum

For the volcanoes in Reunion, the cooling lava has formed very different types of **rock**: they are not the same colour and don't contain the same crystals. Crystals that can be found all over the world also have varying shapes and colours.

Different types of volcanic rock

Rocks of different origins and composition

Crystals around the world

10 PITON DE LA FOURNAISE
At the heart of myths and legends

For a long time, man feared eruptions, as they did not know how to explain these phenomena. Using rituals, they tried to protect themselves from lava and falling ash.

Myths and legends in Reunion

Myths and legends around the world

11 A HISTORY OF PITON DE LA FOURNAISE ERUPTIONS

Several centuries ago, sailors were the first to observe the eruptions of Piton de la Fournaise. Since then, man has continued to explore the island and the volcano to try to understand its formation and activity.

The earliest depictions of the Volcano

The first explorations of the Volcano

Guides and porters: vital assistance for climbing the volcano.

A history of Piton de la Fournaise eruptions

12 THE VOLCANOLOGICAL OBSERVATORY

Thanks to monitors installed all over the volcano, volcanologists are able to predict eruptions!

Monitoring instruments

The objectives of the Observatory

Visit our 4D CINEMA !

UNIQUE IN REUNION !

Come and check out this innovative technology located in the City of Volcanology's outdoor zone, the only one of its kind in Reunion!

Explore the heart of the volcano with Ti'Bul !

A dynamic 4D film which will blow your mind!

Smartphone game !

"The Road to the Volcano"

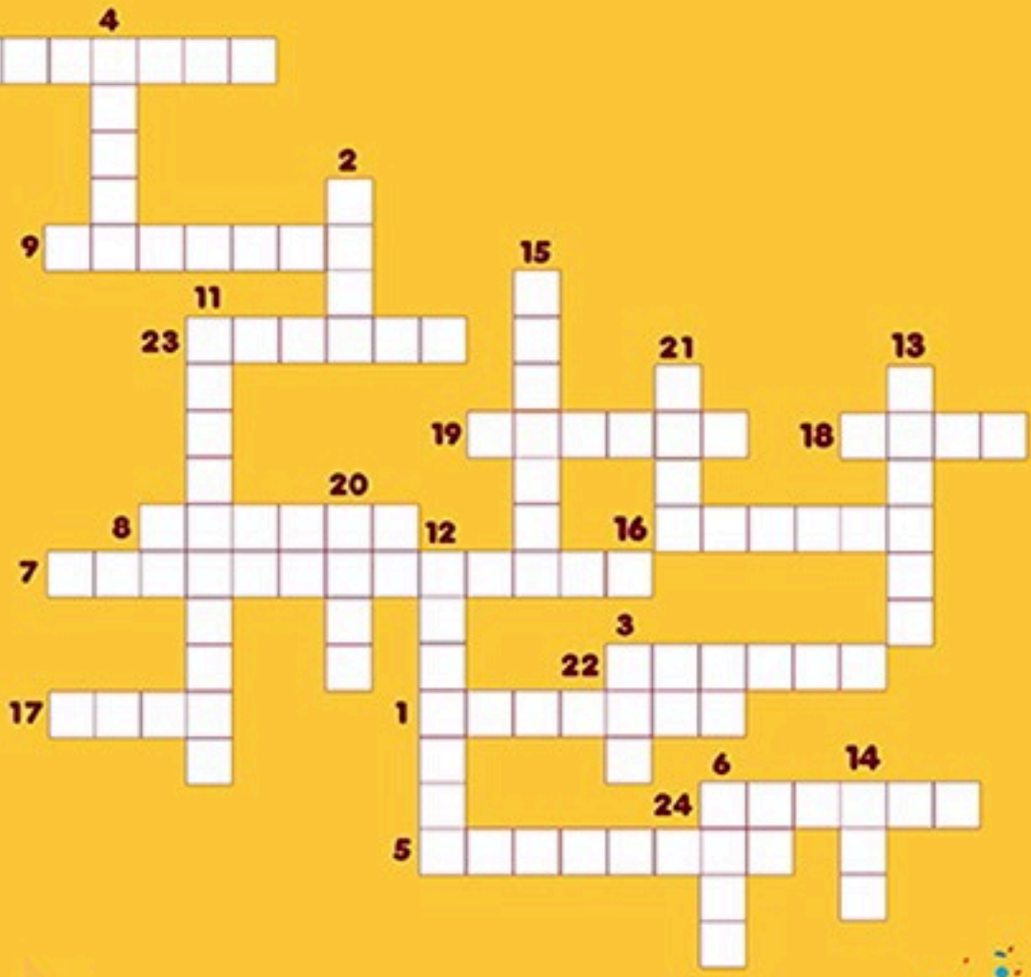
Available on Android and AppleStore

The nasty witch Gran Mer Kal is back, and has cast a spell on the island's tenrecs, hawks and spiders. Ti'Krator has to thwart her wicked plans... A perillous adventure perils awaits him in the mysterious corners of Plaine des sables, in caves full of cyrstals and tunnels of lava!

LET'S PLAY !

Crossword

Read the clues and complete the crossword !



1. Place on the earth's surface where the magma comes out.
2. Molten rock which flows down the slopes of an erupting volcano.
3. This transports molten rock to the surface.
4. A mixture of molten rock and gas formed deep within the earth.
5. When a volcano ejects lava.
6. A pile of scoria projected by the volcano.
7. A scientist who studies volcanoes.
8. Underground vibration. Because of this, scientists know that an eruption is coming.
9. Massive crater formed by the collapse of a volcano.
10. The name of Piton de la Fournaise's largest crater.
11. Former Governor of the island who gave his name to the viewpoint overlooking Enclos Fouqué.
12. Small green crystals in basalt volcanic rocks.
13. A fountain of hot water and steam located near a volcano.
14. Projections of very fine lava which make the soil very fertile.
15. Lava projections the size of grapes.
16. The natural barrier surrounding the summit of Piton de la Fournaise.
17. Large projections of lava, sometimes in the shape of a crust of bread or a cowpat.
18. A plant with long green leaves growing on lava flows. One variety is called 'fanjan.'
19. A plant of whitish colour which forms on lava flows at the beginning of plant colonization.
20. This plant is very soft to the touch, and one of the first to grow on a lava flow after an eruption.
21. The Polynesian goddess of fire and volcanoes.
22. This is the local name of a lava flow with a rough surface.
23. A dark grey rock which is formed when lava from Piton de la Fournaise cools.
24. One of the three cirques carved out by erosion from the heart of Piton des Neiges.

Game anwers

page 6 : diagram

Feel free to visit the third floor and the outside areas !

See you soon at the City of Volcanology !

pages 20-21 : Crossword

1 : VOLCANO ; **2 :** LAVA ; **3 :** GAS ; **4 :** MAGMA ; **5 :** ERUPTION ; **6 :** CONE ; **7 :** VOLCANOLOGIST ; **8 :** SEISME ; **9 :** CALDERA ; **10 :** DOLOMIEU ; **11 :** BELLECOMBE ; **12 :** OLIVINE ; **13 :** GEYSER ; **14 :** ASH ; **15 :** LAPILLI ; **16 :** ENCLOS ; **17 :** BOMB ; **18 :** FERN ; **19 :** LICHEN ; **20 :** MOSS ; **21 :** PELE ; **22 :** GRATON ; **23 :** BASALT ; **24 :** CILAOS.

LET'S VISIT THE CITY OF VOLCANOLOGY ! FOLLOW ME !

LEVEL 2

10 Piton de la Fournaise, at the heart of mysteries and legends

9 stone museum

11 a history of the Piton de la Fournaise eruptions

12 the volcanological observatory

LEVEL 1

7 the submersible

6 living on a volcanic island

5 flows, fountains and volcanic bombs...

8 Volcanoes, a source of life...

3 the solar system

4 walking on a Volcano

2 the hall

1 the lava tunnel

cut out
glue

your finished volcano

town
river
field
road

From the U.S Geological Survey Open-file Report 91-115 Alpha and Gordon

Stratovolcano

Stratovolcanoes are formed following alternating lava flows and ash plumes.

lava flows
ash plumes
volcanic pipe

Cut out, fold and glue your own volcano !

La Cité du Volcan

Volcano Museum

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