MANIC STREET TEACHERS

15-MINUTE SENTENCE SKILLS
MOUNTAINS, VOLCANOES
AND EARTHQUAKES



CONTENTS

Planning Overview	рЗ
Day 1 - About Mountains, Volcanoes and Earthquakes	p4-5
Day 2 - Multiple-Choice Questions	р6
Day 3 - Sentences and Fragments 1	p7
Day 4 - Sentences and Fragments 2	p8
Day 5 - Unscramble the Sentences	p8
Day 6 - Running Sentences	Pq
Day 7 - Sentence Types 1	p 10
Day 8 - Sentence Types 2	p11
Day 9 - Conjunctions 1	p12
Day 10 - Conjunctions 2	p12
Day 11 - Appositives	р13
Day 12 - Combining Sentences 1	p 14
Day 13 - Combining Sentences 2	p14
Day 14 - Expanding Sentences 1	p 15
Day 15 - Expanding Sentences 2	p 15

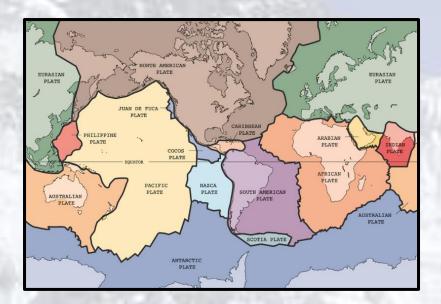
Planning Overview

Day 1 - Read the Text	Day 2 - Multiple-Choice Quizzes
Read aloud to the class. Allow the class to read	Model how best to answer multiple-choice
it to each other or aloud themselves.	questions. Allow them to refer to the text.
Supplement with videos and discuss sticking	Check for comprehension and discuss further
points/vocabulary.	sticking points.
Day 3 -Sentences and Fragments 1	Day 4 - Sentences and Fragments 2
Discuss the difference between a fragment and	Teacher takes a fragment from yesterday and
a sentence. Ensure as many of the children in	models how to turn it into a sentence. Children
class are heard orally first. Children identify	do the same and those that can are asked to
F/S and then the fragments in the passage.	expand further.
Day 5 - Unscramble the Sentences Discuss what makes a full sentence rather than	Day 6 - Running Sentences
	Explain that the sentences do not have full-
just a fragment. Model how to unscramble a	stops or capital letters and that they need
sentence first, crossing out words used.	reading carefully to identify where the
Children can work independently or in pairs	sentence ends and begins. Teacher could
depending on how challenging it is for them.	model the task using the first passage.
Day 7 - Sentence Types 1	Day 8 - Sentence Types 2
Discuss the differences between statements,	Remind children of lessons learned from the
commands, explanations and questions.	previous session. Model 1a, 2a and 3a if
Children identify the sentence types and then	necessary, before children complete the work
have a go at writing their own. These may need	independently. Again, work may need to be
editing/re-drafting or marking for accuracy.	edited/re-drafted or marked for accuracy.
Day 9 - Conjunctions 1	Day 10 - Conjunctions 2
Discuss the purpose of because, but and so and	Discuss the format of a sentence that starts with
ensure children are clear on how they are	a subordinating conjunction and share the
used. Teacher may wish to model an alternative	meaning of the chosen subordinating
first before children complete. Children edit/re-	conjunctions. Children edit/re-draft and
draft and teacher marks as necessary.	teacher marks as necessary.
Day 11 - Appositives	Day 12 - Combining Sentences 1
Discuss the definition of an appositive and give	Teacher models how to use conjunctions,
examples if necessary. Children draw lines from	appositives or subordinating conjunctions to
the nouns to the appositives. They could do this	combine the two sentences before children
in pairs. Using the appositive from the first	then have a go. Share good examples with the class and discuss errors.
section, children fill in the first missing gap. They then complete the last two independently.	ciass and discuss errors.
	Day 14 Evpanding Septences 1
Day 13 - Combining Sentences 2	Day 14 - Expanding Sentences 1
Teacher models how to use conjunctions,	Using the information text if needed, the
appositives or subordinating conjunctions to combine the two sentences before children	teacher models where to find the information
	and what to record. Teacher models using the
then have a go. Share good examples with the class and discuss errors.	information to create the expanded sentence. Children then have a go independently.
Day 15 - Expanding Sentences 2	Further Opportunities
Using the information text if needed, children work in pairs to fill in the information. They then	Children could have an opportunity to
consider the previous day to help create their	complete a paragraph using our Slow Writing guide focusing on practiced sentence types or
	they could write a short essay based on a
own expanded sentence.	question with success criteria.
	question with success chiefia.



About Mountains, Volcanoes and Earthquakes

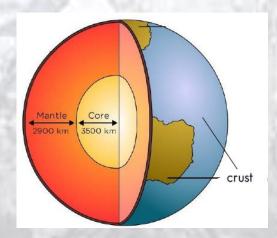
The part of the land that is moving in the Earth's crust is called the lithosphere. The lithosphere is made up of the Earth's crust and a part of the upper mantle. It moves in big chunks of land called tectonic plates. Some of these plates are huge and cover entire continents.



Tectonic plates are around 62 miles thick and the movement of these help with the creation of mountains, volcanoes and earthquakes. They move between 1cm-10cm per year.

Inside Earth

Earth is made up of three sections. The crust consists of solid rock. Below this is the mantle, so hot that the rock has melted and flows like liquid. Finally, the core which is a hotter ball of iron and nickel is at the centre of the planet.



Igneous Rock

Igneous rock is formed when magma or lava from volcanoes cools. Examples include basalt and granite. Most igneous rock is very hard. Some of the most spectacular rock formations on our planet are made of igneous rock.

Sedimentary Rock

Sedimentary rocks are formed over millions of years when sediments (tiny pieces of rocks and animal skeletons) are pressed together at the bottom of seas and rivers (e.g. sandstone, coal and chalk). Some sedimentary rocks contain fossils (bones or shells of living things that were buried long ago and have turned to stone).

Metamorphic Rock

Metamorphic rocks are formed when other rocks are changed due to heat or pressure. Examples include slate and marble.

Metamorphic rocks are very hard but can be damaged by acids like acid rain or even lemon juice!

Mountains Fold Mountains Two plates push into each other (converge) and the plates start to push upwards. Fault Block Mountains Two plates converge but rather than the pressure pushing the mountain upwards, a section breaks at weak points and that entire section is forced upwards. Dome Mountains Magma from the mantle pushes its way up through the crust without erupting at the surface. It then pushes the layers of rock upwards. The magma cools and becomes solid rock. Volcanoes Volcanoes generally form on the **Formation** boundaries of the tectonic plates. Tectonic plates can move apart from each other (diverge) leaving a space for magma to erupt. If plates converge, one plate is forced underneath the other, leaving space for magma to spill out. Ring of Fire The Ring of Fire is a major area around the Pacific Ocean where many earthquakes and volcanic eruptions occur. It is a large 40,000km horseshoe shape with 452 different volcanoes along it! Earthquakes Formation When tectonic plates move parallel to each other it causes friction that sticks them together. When they get unstuck, it can cause a violent jolt which causes an earthquake. Magnitudes Shockwaves spread out from the epicentre (the strongest point of the earthquake). Magnitude, measured on a Richter scale, measures how strong an earthquake is. 1 is a small tremor and 9 is catastrophic!

Volcanic bomb (ash, rock and gas) crater cone magma chamber

Tsunamis

A tsunami is a large ocean wave usually caused by an underwater earthquake or a volcanic explosion. During a tsunami, water flows straight. It can travel many miles inland which is why tsunamis cause so much damage!



What is a volcano?

A volcano is a mountain that opens downward to a pool of molten rock below the surface of the earth. When pressure builds up, eruptions occur. Gases and rock shoot up through the opening and spill over or fill the air with lava fragments. Eruptions can cause lateral blasts, lava flows, hot ash flows, mudslides, avalanches, falling ash and floods. Volcano eruptions have been known to knock down entire forests. An erupting volcano can trigger tsunamis, flash floods, earthquakes, mudflows and rockfalls

What are the 3 main types of volcano?

Scientists have categorized volcanoes into three main categories: active, dormant, and extinct. An active volcano is one which has recently erupted and there is a possibility that it may erupt soon. A dormant volcano is one which has not erupted in a long time but there is a possibility it can erupt in the future. An extinct volcano is one which has erupted thousands of years ago and there's no possibility of eruption.

What is the difference between lava and magma?

Magma is liquid rock inside a volcano. Lava is liquid rock (magma) that flows out of a volcano. Fresh lava glows red hot to white hot as it flows.



DAY 2 Multiple-Choice Quiz



1.) What is the part of land that moves in Earth's crust called? a.) mountains b.) lithosphere	6.) What does an underwater earthquake cause?a.) a tsunamib.) a tidal wavec.) a whirlpool
c.) magma 2.) How thick can tectonic plates be? a.) 62 metres b.) 62 kilometres c.) 62 miles	7.) Where is the Ring of Fire situated? a.) Atlantic Ocean b.) Pacific Ocean c.) Southern Ocean
3.) What metals are the Earth's core made up of? a.) nickel and copper b.) iron and zinc c.) iron and nickel	8.) What can a volcanic eruption not cause? a.) avalanches b.) mountains c.) floods
4.) What type of rock is marble? a.) igneous b.) metamorphic c.) sedimentary	9.) What volcano has not erupted for a very long time but may still do so?a.) activeb.) extinctc.) dormant
5.) What is formed when magma pushes upwards but becomes solid and does not erupt? a.) fold mountains b.) fault mountains c.) dome mountains	10.) What flows inside a volcano? a.) magma b.) lava c.) sedimentary rock



<u>Total Score</u> out of 10





Sentences and Fragments 1

Task 1 - Speaking in Sentences

Your teacher will say the fragments below.
Using these fragments, can you come up with a sentence to say out loud?

- 1a.) lithosphere is
- 1b.) gigantic tectonic plates
- 1c.) mountains, earthquakes and volcanoes

Task 2 - Identify the Fragments

Write F (Fragment) or S (Sentence) for each one. *There is no punctuation here on purpose.*

2a.) earth has a crust	
2b.) nickel and iron	
2c.) the mantle moves	
2d.) the core is at the centre _	
2.e) the solid crust	

Task 3 - Finding the Fragments

Underline the fragments in the passage below.

We know that Earth was formed billions of years ago from gases and fiery material. 4.5 billion years ago. The Earth's surface might seem cool, stable, and fixed but underneath the surface, things are always changing. Red hot! The Earth's inner core is a huge metal ball about 2,500km wide. the temperature of the ball is 5,000°C to 6,000°C. That's about the same temperature as the surface of the sun! The metal at the inner core. Iron and Nickel stays solid here because of the incredible pressure surrounding it.





Sentences and Fragments 2

Task 1 - Strengthen the Sentence

Turn the fragments from the previous activity into simple sentences below	٧.
---	----





- 1.) a igneous rock type Granite of is
- 2.) into rock pressure or turn rocks metamorphic heat
- 3.) and made rock of rock bones is sedimentary up
- Challenge: volcano flows a hardens and from becomes lava that rock





Running Sentences

These are sentences which run for too long because there are not enough full-stops.

Can you spot where they should go?

1.) Tsunami means "great harbour wave" in Japanese. They are often mistaken for tidal waves their strength has nothing to do with the tides. About four out of five tsunamis happen within the Ring of Fire this is a zone in the Pacific Ocean where earthquakes and volcanic eruptions frequently take place. They occur when tectonic plates grind together underwater and cause an earthquake it then sends a rush of water outwards from the ocean towards land.

2.) In deep water, a tsunami moves at great speeds however, when it approaches shallow water near coastal areas, the tsunami slows down but increases in height it can sometimes reach heights of over 30 meters and they can still be travelling at a speed of over 50 miles per hour a gigantic wall of water traveling at such speed can result in widespread damage to the entire population properties of the coastal cities can be destroyed because a huge tsunami has the potential of travelling several miles inland.







10

Sentence Types 1
You will need to know how to use *statements, commands, questions* and *exclamations*.

Task 1 - Searching for Sentence Types

Put the correct piece of punctuation at the end of each sentence to indicate if it is a statement, command, question or exclamation.

1a.) Amazingly, there are 452 volcanoes in the Ring of Fire		
1b.) One tectonic plate can move over another		
1c.) A volcanic bomb contains ash, rock and gas		
1d.) Can volcanoes trigger tsunamis		
1.e) Are dormant volcanoes erupting now or in the past		
1f.) You must not go near an active volcano		
Task 2 - Trying Sentence Types Have a go at writing your own sentences following the instructions below. Remember your punctuation. 2a.) Use the word fold in a statement sentence.		
2b.) Use the word <i>fault</i> in a question sentence.		
2c.) Use the word <i>dome</i> in an exclamation sentence.		



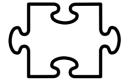
DAY 8Sentence Types 2

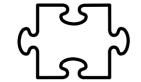


Task 1-Sentence Type Turn-a-Round

Change the following statements into questions below.

1a.) Magnitude measures how strong an earthquake is.
1b.) Earthquakes are caused from friction between parallel plates.
Task 2 - Sentence Type Turn-a-Round Change the following questions into statements below.
2a.) Is 9 on the Richer scale strong?
2b.) Does the epicentre of an earthquake spread shockwaves outwards?
Task 3 - Jeopardy Use the two answers to come up with two questions. Answer 3a = crater / Answer 3b = eruption cloud
3a.)
3b.)



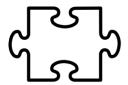


Conjunctions 1

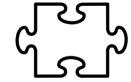
Complete the Clause

Think carefully about how to correctly use the conjunctions because, but and so.

- 1.) Volcanoes can be destructive because
- 2.) Volcanoes can be destructive but
- 3.) Volcanoes can be destructive so



DAY 10



Conjunctions 2

Subordinating Conjunctions

Think carefully about how to correctly use the following subordinating conjunctions.

- 1.) Whilst many volcanoes are extinct,
- 2.) Even though earthquakes are rare,
- 3.) Because a tsunami wave can reach heights of up to 30 metres,





Appositives

Task 1 - Matching Nouns to Appositive

An appositive is a noun or a noun phrase that sits next to another noun to rename it or to describe it in another way.

fold mountains caused by broken tectonic plates

Ben Nevis situated in the Himalayas

fault mountains converging tectonic plates

Mount Everest formed from magma pushing upwards

dome mountains the tallest mountain in the U.K.

Task 2 - Add in an Appositive

the world standing		, is the tallest mountain in
2.) Extinct volcanoe are thought to be in	es, n the 1000s throughout the w	orld.
3.) The Earth's core studied directly by modelling instead.	scientists so they use experim	, cannot be nents and computer





Combining Sentences 1

Task 1 - Combining Two Sentences

Think about how you might combine these two sentences. You might use conjunctions, appositives or subordinating conjunctions. You can amend the sentences slightly to help.

1) 6 1 1 1 1 1 1 1 1	Volcanoes erupt causing destruction.	
1.) Combine the following sentences:	The Ring of Fire is around the Pacific Ocean.	
Oc DAY	13	
Combining S		
Combining S	entences 2	
<u> Task 2 - Combining</u>	Three Sentences	
Think about how you might combine these three sentences. You might use conjunctions, appositives or subordinating conjunctions. Join two at the least. You can amend the sentences slightly to help.		
	The crust is on the outside of Earth.	
2.) Combine the following sentences:	The mantle is under the crust. The core is at the centre of Earth.	

X

DAY 14



Expanding Sentences 1

Tsunamis can occur.	•
When	
Who	
Where	
What	
Expanded sentence:	
DAY Expanding Se	X
The Ring of Fire has many volcanoes.	
Who	
Where	
Why	
What	
Expanded sentence:	
· ————————————————————————————————————	