

# PLATE TECTONICS

Name: \_\_\_\_\_

Period: \_\_\_\_\_

## VIDEO #1: INTRODUCTION (SLIDE 2)

1. What makes Erta Ale a special volcano?	
2. Why is the Earth's heat important?	
3. How old is the Earth? Describe how it formed and why it is so hot.	

## THE THEORY OF PLATE TECTONICS STATES THAT... (SLIDES 3-6)

1.
2.
3.
4.

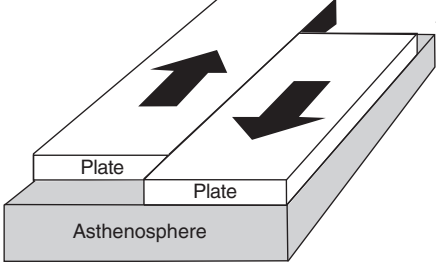
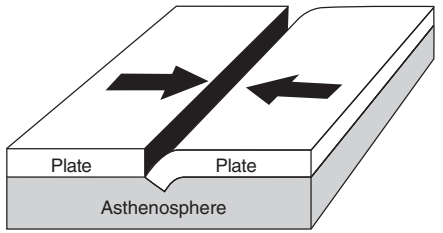
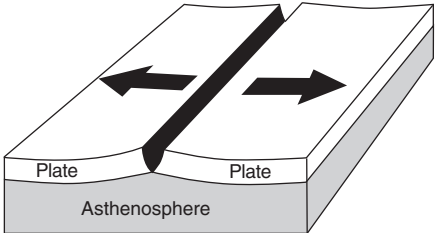
## THE KEY TO PLATE TECTONICS IS CONVECTION. (SLIDES 7-27)

In your own words, describe the process of convection.	
Draw a simple labeled diagram showing how convection currents work.	

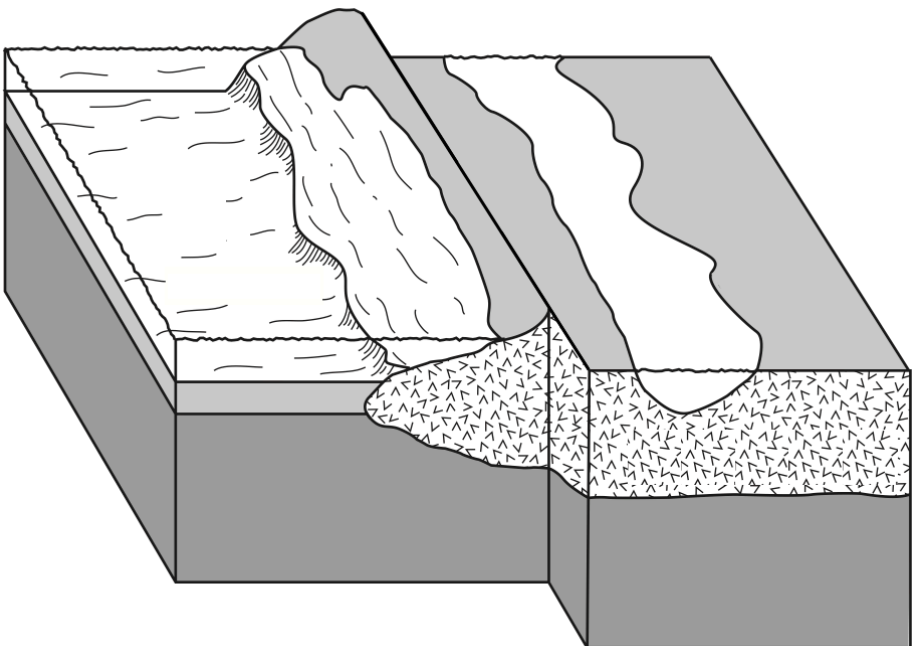
## VIDEO #2: CONVECTION (SLIDE 28)

1. What is convection and how does it move the plates?

### THE THREE TYPES OF PLATE BOUNDARIES ARE... (SLIDE 35-37)

		
Name:	Name:	Name:
Motion:	Motion:	Motion:

### TRANSFORM PLATE BOUNDARIES (SLIDE 38-43)

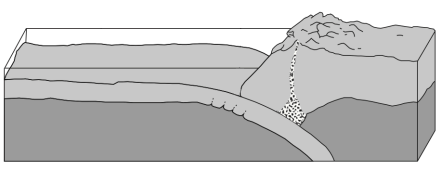
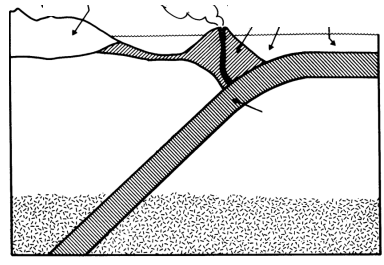
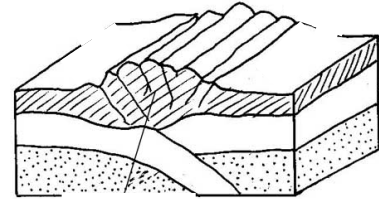
1.	
2.	
3.	

*Please label the diagram as is seen in the LinkViewer*

## VIDEO #3: TRANSFORM (SLIDE 44)

1. The San Andreas Fault extends from _____ to _____.	
2. How many earthquakes are triggered by the San Andreas Fault each year?	
3. Using page 5 of your ESRT, describe the locations of two transform faults other than the San Andreas Fault.	

## THE THREE TYPES OF CONVERGENT PLATE BOUNDARIES (SLIDE 46)

		
Name:	Name:	Name:
Description:	Description:	Description:

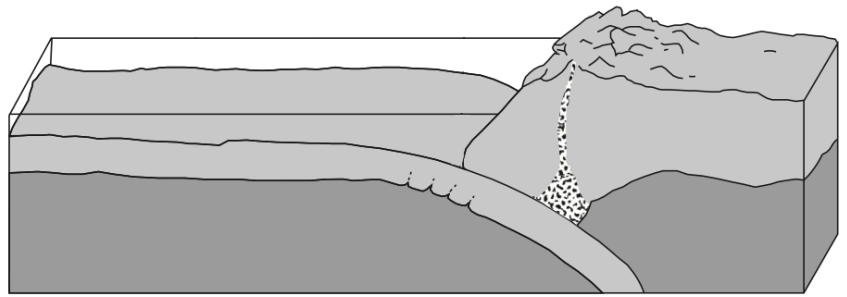
## SUBDUCTION ZONE (SLIDE 47-53)

1.

2.

3.

4.



*Please label the diagram as is seen in the LinkViewer*

## VIDEO #4: SUBDUCTION (SLIDE 54)

1. What causes the earthquakes along the subduction boundary?

# ISLAND ARC (SLIDE 55-61)

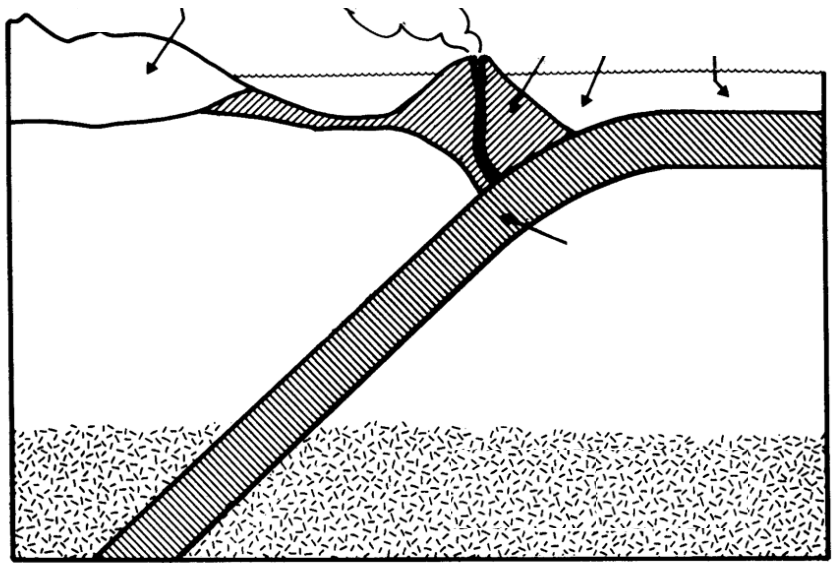
1.

2.

3.

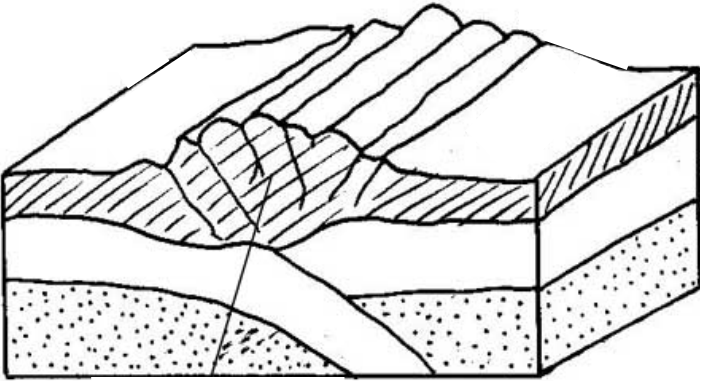
4.

5.



*Please label the diagram as is seen in the LinkViewer*

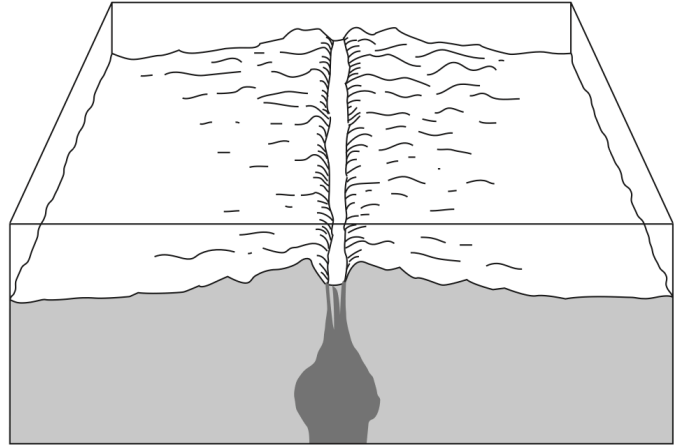
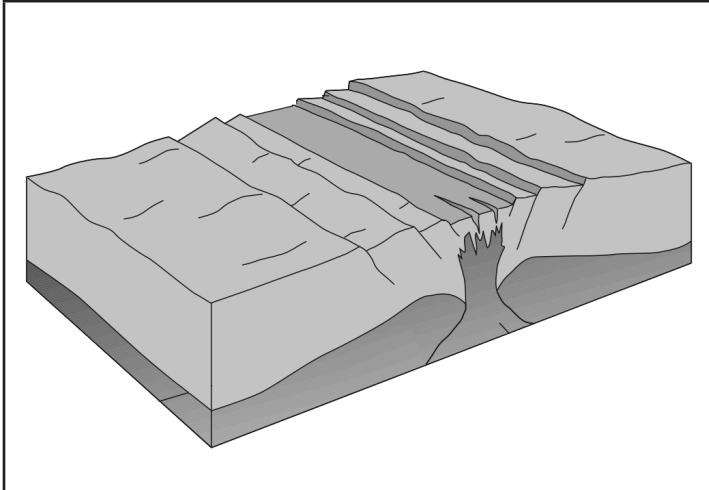
## COLLISION ZONE (SLIDE 62-66)

1.	 <p data-bbox="698 829 1453 871"><i>Please label the diagram as is seen in the LinkViewer</i></p>
2.	
3.	

## VIDEO #5: COLLISION (SLIDE 67)

1. How long did it take for the Himalayas to be uplifted 5 miles high?	
2. What evidence proves that the Himalayas were uplifted from beneath sea level?	
3. Describe the two ways the Himalayas are moving.	

## THE TWO TYPES OF DIVERGENT PLATE BOUNDARIES (SLIDE 69)



Name:

Name:

Description:

Description:

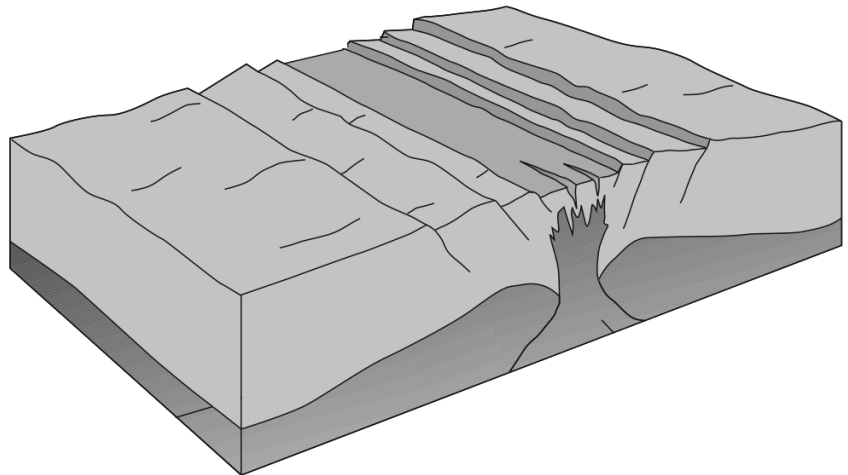
## RIFT ZONE (SLIDE 70-76)

1.

2.

3.

4.



*Please label the diagram as is seen in the LinkViewer*



## VIDEO #6: RIFT VALLEY (SLIDE 76)

1. Explain why the East African Rift is opening up.

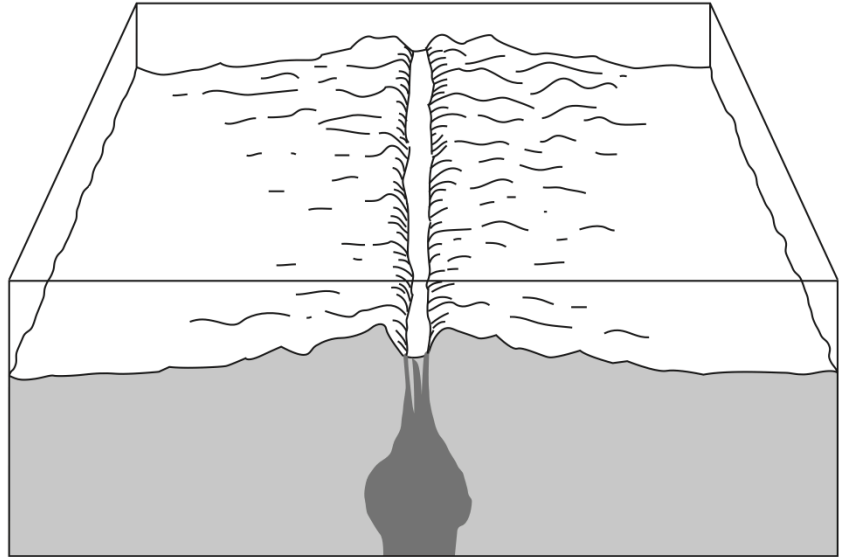
## MID-OCEAN RIDGE (SLIDE 77-82)

1.

2.

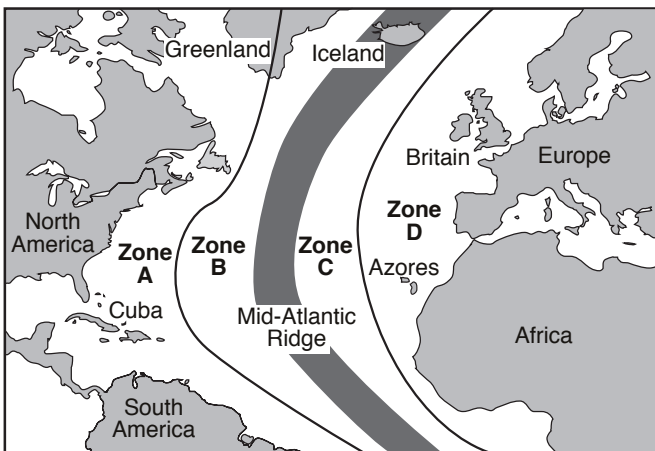
3.

4.



*Please label the diagram as is seen in the LinkViewer*

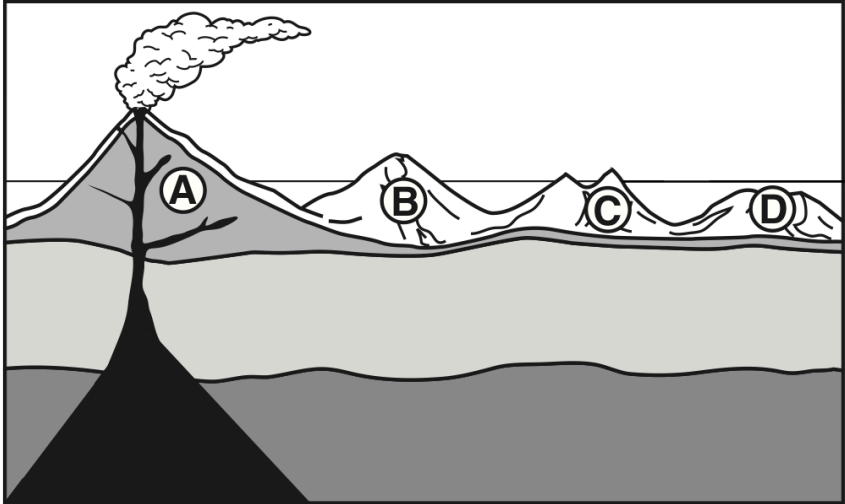
## EVIDENCE SUPPORTING SEAFLOOR SPREADING (SLIDE 83-93)



*Color in Zones A, B, C, and D using green for older crust and yellow for younger crust.*

1. Using your own words, describe how the patterns of magnetism on the seafloor supports the idea of seafloor spreading.

## HOT SPOT (SLIDE 99–111)

1.	
2.	
3.	
4.	

*Please label the diagram as is seen in the LinkViewer*

## VIDEO #8: HOT SPOTS 1 (SLIDE 112)

1. What is the name of the new Hawaiian island currently forming at the bottom of the Pacific Ocean?	
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## VIDEO #9: HOT SPOTS 2 (SLIDE 113)

1. How long is the chain of seamounts and volcanic islands formed by the Hawaiian Hot Spot?	
2. What geographic direction is the Pacific plate moving (you will have to listen carefully and think!)	