Name				

Volcanoes & Earth's Moving Plates (p. 330 – 335)

I. What Are Volcanoes?

1. Define the term volcano.



anars

trock

mud metted snow,

Volcano-opening in the Earth that empts gases ash, + lava

2. How many volcanoes on Earth are active?

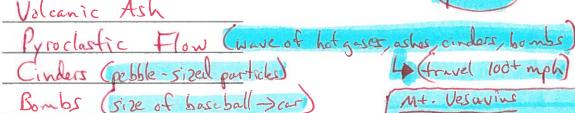
600 - 1,500 (surface) -> Most are dorment (inactive)

3. What is the name of the most active volcano on Earth?

Mt - Kilauea Hawai'i



1. List four types of materials released during a volcanic eruption.



(travel loot mph) Mt. Vesavins -destroyed the cities of Pompeii +

0.331

Nesalo del Kuiz III. How Do Volcanoes Form?

Columbia - 120 maters high travel 30 miles -destroyed the city of Armero (20,000 people)

1. How does magma form deep inside the Earth?

Heat + pressures changes cause rock to melt

2. What causes magma to be forced slowly to the surface of the Earth?

Magna is less dense then the rock around it

3. How long does it take for magma to reach Earth's surface?

thousands to millions of years

4. Define the term vent.

Vent - opening in the Earth's surface where magma flows ou (Side vent or Crater Vent

5. Define the term crater.

Crater - steep-walked depression around a volcanos vent

					Name	-	
here Do Vol	canoes Occ	ur?					
1. List thre	e locations v	where volcano	es form?				
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		nt Bour		_			
	11	2700	CAUX 1-3				
2. Describe			g the mid-o	- cean ridg	res. (Ev.	- Mid-+	Attentic Ridge
Alo	ina the	rift valley	less on	ICC NE	t of cro	hs in	the ocean
Flo	IOT GIZE	lually 60	ildina	ne.W	mountai	~s.	
	,	along divergin					ook.)
	e One:	True		The second secon			Africa)
4. Volcano	s form near	r convergent b					_
<u>Circl</u>	e One:	True	False	Ex	-Sub	luction	Coves
5. Circle th	e letter of tl	he types of plat	tes that coll	ided to fo	orm the An	des Moun	tains.
6. a	continental 1	lates Mar plate and an oce plate and an isla al plates	anic plate	> Peru	-Chile Tr ayan Mts	ench -/Appal.	chian Nots.
6. What is	he Pacific I	Ring Of Fire?	(Not in the	book.)			
A	major	volcanic 1	self for	med &	y meny	valcano	es that
		e Pacific					
7. Volcano	es at bound:	aries where tw	o oceanic p	lates colli	ide create i	slands cal	led an:
	sland	arC	(Not	in the boo	ok.)		
		nd arcs on Ear	4.0				
1.	Japan	2.	Alentio	~ Is(and 3.	Indo	resia
4	New Z	extend 5.	Philip	ppines	6(Parile	nesia en Islands
9. Define th				4			
Hot S	Spot – area	where n and me	naterial	from a	within -	the ma	ntle
10. Give an		f a hot spot vol		٠ ر	<i>J</i> \		
				Othe	r Eran	uples:	
, (-c willow	Islan		- Ice	land	-	Galapagos

I stands

IV. Where Do Volcanoes Occur?

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Volcanoes

I. Volcano Facts

- mountains that build taller and taller as they erupt
- built up by lava flowing out of vents, cooling, and layering
- most are dormant (inactive)
- materials released from volcanoes:
- smoke
- volcanic ash (volcanic fragments smaller than 2mm)
- lava (aboveground molten material)
- pumice (light, porous volcanic rock)
- tephra (fragments of volcanic rock)
- gases emitted from volcanoes:
- water vapor
- carbon dioxide
- sulfur dioxide
- hydrogen chloride
- hydrogen fluoride
- most are 10,000 100,000 years old
- about 1,500 active surface volcanoes (about 10,000 undersea volcanoes)
- Indonesia = country with most volcanoes
- <u>United States</u> = lower 48 states (~ 40 volcanoes) = Alaska (~ 60 volcanoes)
- <u>Largest Volcano</u> = Mauna Loa, Hawaii (29,000 feet above seafloor)
- Oldest Volcano = Mount Etna (350,000 years old)

II. Volcanic Explosivity Index (V.E.I.)

- estimates the relative size of an explosive eruption
- 0 8 index scale of increasing explosivity (each 1.0 increase = 10X magnitude)
- no known explosive events with a V.E.I. larger than 8
- index value determined according to : volume of erupted pyroclastic material
 - height of eruption column
 - duration in hours
 - descriptive terms
- past 10,000 years of V.E.I. data: 2 = 3,477 eruptions
 - 3 = 868 eruptions
 - 4 = 278 eruptions
 - 5 = 84 eruptions
 - 6 = 39 eruptions
 - 7 = 4 eruptions