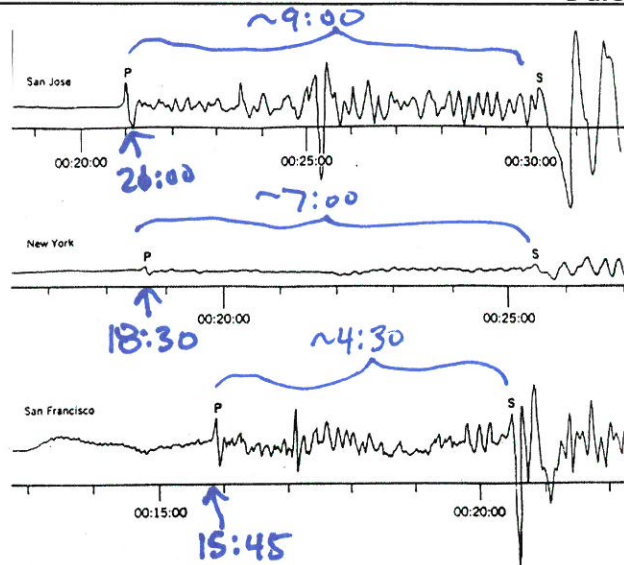


Earthquake and Volcano Review Activity:

Name: _____ Date: _____ Period: _____



- Using the seismographs above, put the order of the stations in order from closest to the epicenter to farthest. Justify your answer.

San Francisco → New York → San Jose
① LESS DIFFERENCE BETWEEN P + S WAVES → CLOSER
② INITIAL ARRIVAL TIME

- Diagram the three types of faults below. Label the fault, standing wall, hanging wall and type of force that caused the fault:

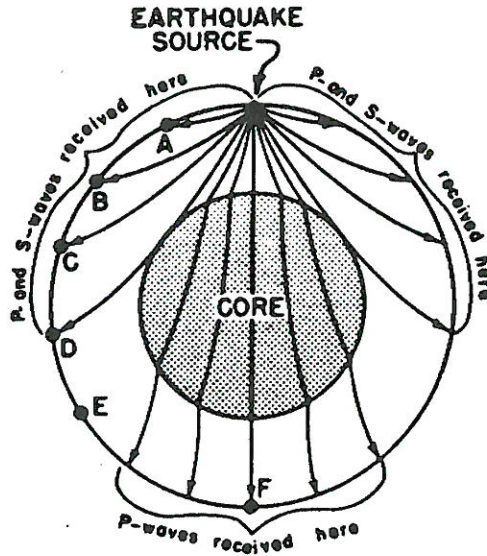
Types of Fault:	NORMAL	REVERSE	SLIP-STRIKE
Diagram:			
Force:	TENSIONAL	COMPRESSIONAL	SHEAR

(P:WAVE)

(S:WAVE)

3. Describe the motion of energy in a P-wave versus an S-wave:

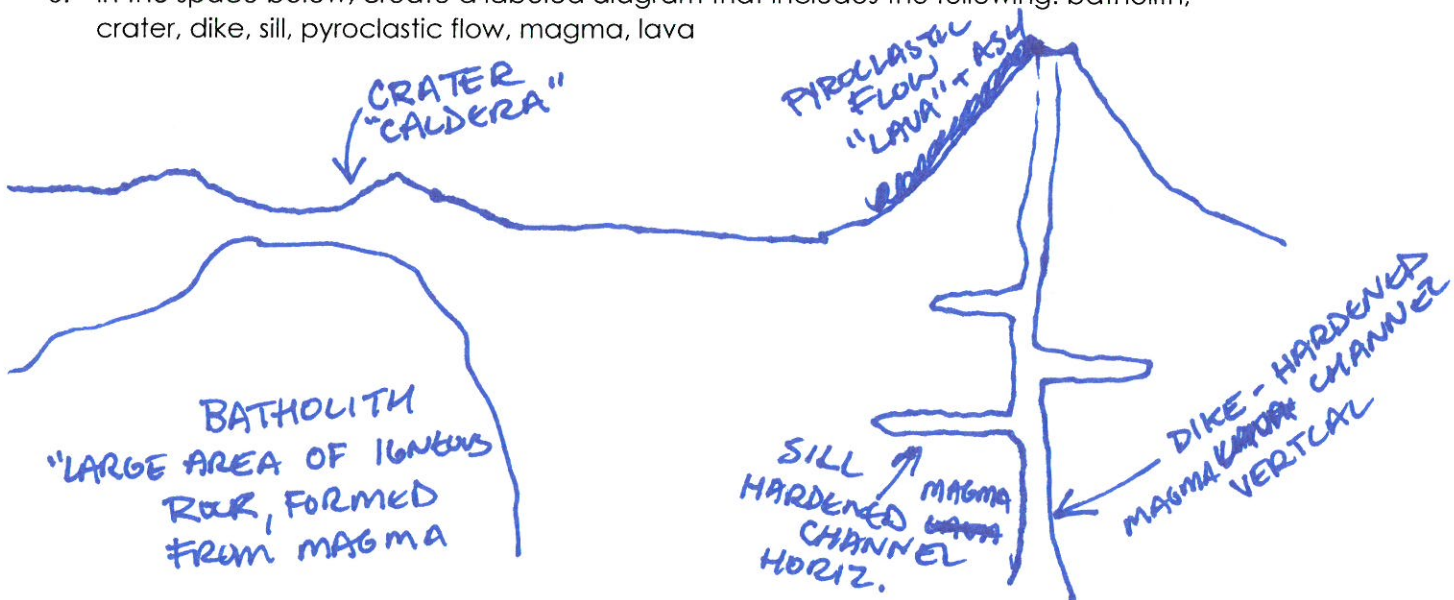
P-WAVE: ENERGY BACK + FORTH IN DIRECTION OF TRAVEL
S-WAVE: ENERGY UP + DOWN IN DIRECTION OF TRAVEL



4. In the space below, describe why the paths of seismic waves bend, why station F did not receive any S waves, and why station E did not receive any waves:

• WAVES BEND DUE TO CHANGE IN DENSITY OF LAYERS
• NO SWAVES AT F B/C THEY CAN'T TRAVEL THROUGH LIQUIDS
• NO WAVES @ E B/C DEFLECTED OR STOPPED (SHADOW ZONE)

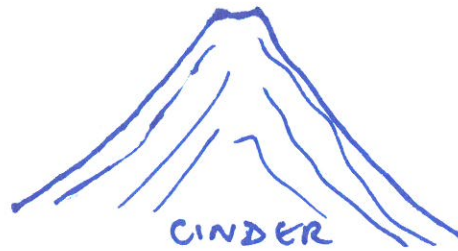
5. In the space below, create a labeled diagram that includes the following: batholith, crater, dike, sill, pyroclastic flow, magma, lava



6. Describe what things can affect the explosiveness of a volcanic eruption:

• AMOUNT OF WATER VAPOR	↑ H ₂ O	↑ EXPLOSION
• AMOUNT OF DISSOLVED GASES	↑ GASES	↑ EXPLOSION
• TYPE OF LAVA/MAGMA	↑ SILICA	↑ EXPLOSION
	↓ SILICA, MORE BASALT	↓ EXP.

7. In the space below, draw a diagram of a shield volcano and a cinder cone. On the lines below that, describe any differences in structure, formation, and lava type:



SHEILD - LESS EXPLOSIVE, MORE BASALTIC LAVA, HOT SPOTS
CINDER - LAYERS OF CINDER BUILD UP CONE, MORE EXPLOSIVE, CONVERGENT BOUNDARIES