

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

## Finding Epicenters

Complete the chart below using your knowledge of Earth Science and your Handy Dandy Earth Science Reference Tables. Please note that stations A, B, and C are picking up a different earthquake than stations 1, 2, and 3.

| Seismograph<br>Station | Arrival (clock time) |          | Difference in<br>arrival time<br>min. & sec. | Distance to<br>epicenter<br>(km) | "P" Wave<br>travel time<br>min. & sec. | Time of<br>origin<br>hr, min, & sec |
|------------------------|----------------------|----------|--|----------------------------------|--|-------------------------------------|
|                        | "P" Wave             | "S" Wave |  |                                  |  |                                     |
| Seattle                | 5:33:40              | 5:36:40  |  |                                  |  |                                     |
| Chicago                | 5:38:05              | 5:44:35  |  |                                  |  |                                     |
| Houston                | 5:37:30              | 5:43:30  |  |                                  |  |                                     |

According to your Handy Dandy Earth Science Reference Tables, what is the difference in arrival times of P-waves & S-waves at a seismic station 6,200km away from the epicenter of an earthquake?

If the earthquake occurs at 9:20 am, what time will a seismic station 2,600km away pick up the P-wave?

What time will it pick up the S-wave?

