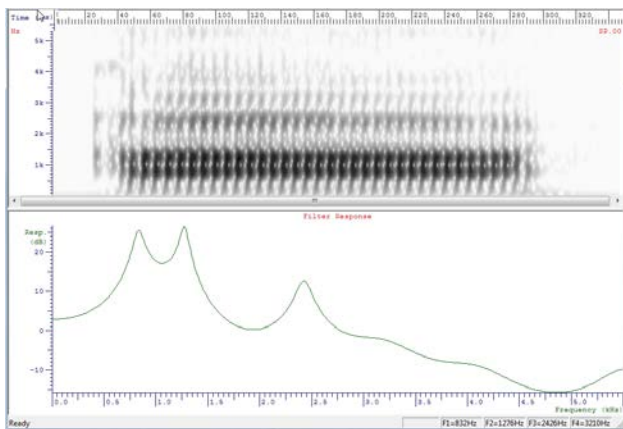
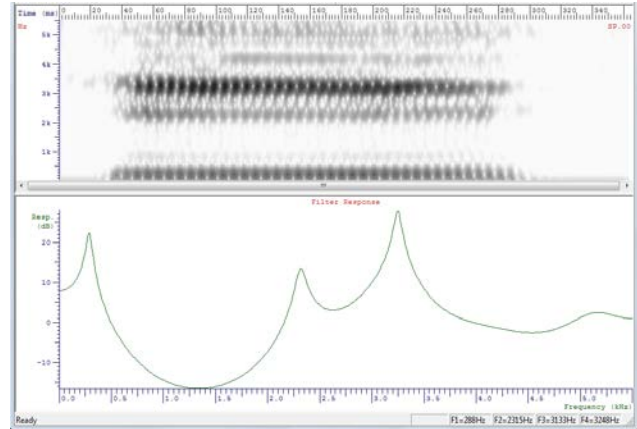
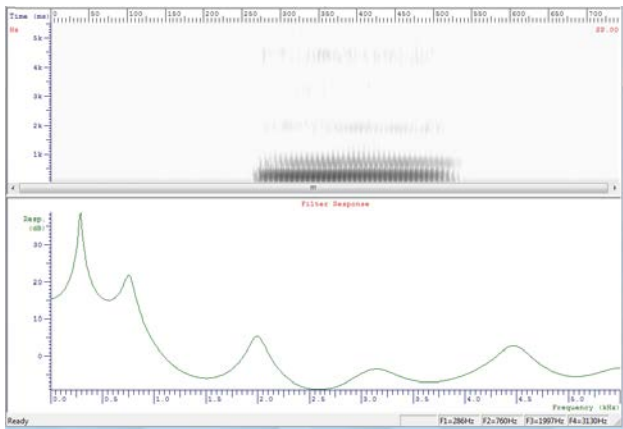
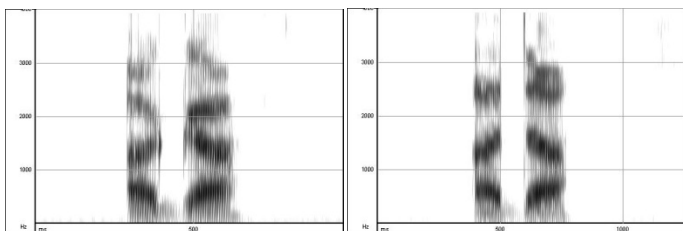


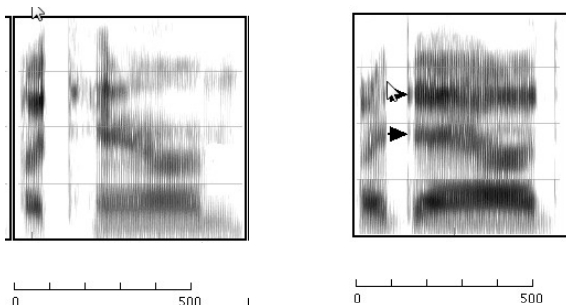
1. Locate the first three formants on the spectrogram and the spectrum for each vowel. Label the /i/, the /a/ and the /u/. Create an F1 X F2 plot for these three vowels.



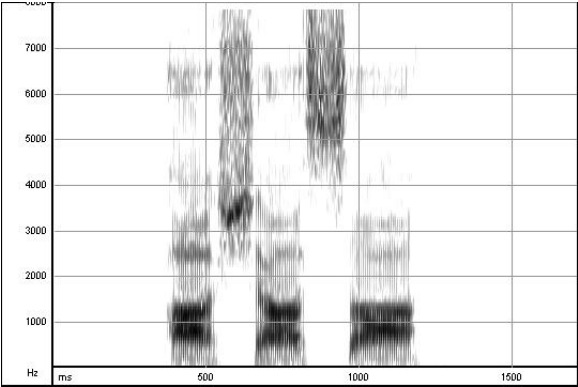
2. One of these spectrograms shows a medial /d/, the other shows medial /g/. Label them and give the evidence for your choice.



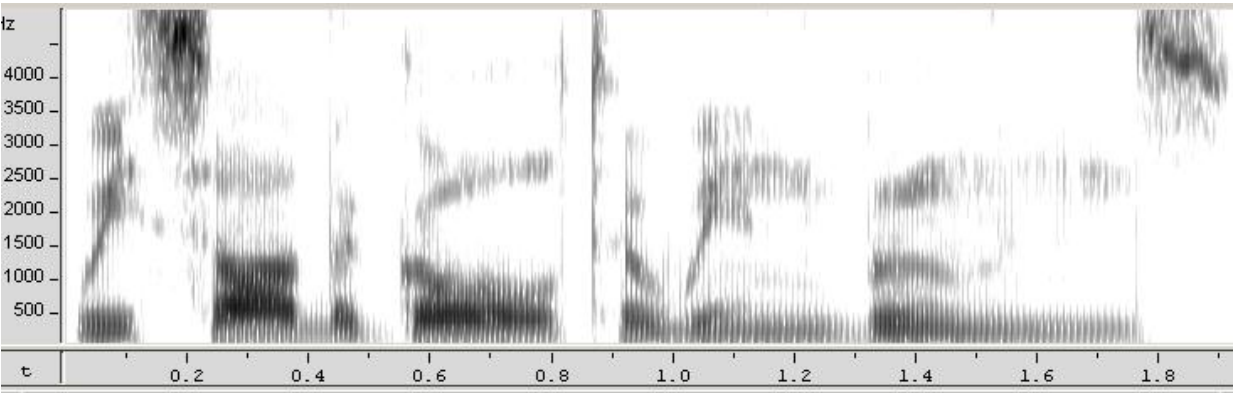
3. One of these spectrograms shows a voiced initial stop, the other a voiceless initial stop. Label them and give the evidence for your choice.



4. Two sibilant fricatives are shown in the spectrogram below. Label the /s/ and the /ʃ/ and give the evidence for your choice.



4. Choose the correct words from the choices below. Label the words on the spectrogram, and explain what acoustic cues you used to make your choices for each word.



	sue		bowl		win	boons
We		the		to		
	saw		goal		bin	beans

5. Label the two utterances below. One says, “No dogs are here,” and the other says “No. Dogs are here.” Explain your choice. Describe the pitch patterns for both utterances.

