# VOWEL and CONSONANT MAPPING <br> By Susan Bonito 

International Phonetic Symbols, (IPA), English equivalents and location of resonance

Rounded Lip Vowels

| $1^{*}$ | $/ \mathrm{y} /$ | tu (French) |
| :--- | :--- | :--- |
| $2^{*}$ | $/ \mathrm{u} /$ | boo |
| 2.5 | $/ \sigma /$ | put |
| $3^{*}$ | $/ \mathrm{o} /$ | open |
| 3.5 | $/ \propto /$ | world/coeur |
| 4 | $/ \mathrm{l} /$ | awful |
| 4.5 | $/$ /ə/ | the |

## Neutral lip/active tongue vowels:

| 5 | la/ | casa (high) |
| :--- | :--- | :--- |
| 5 | /a/ | father (low) |
| 6 | /l/ | it |
| 7 | læ/ | at |
| 8 | $/ \varepsilon /$ | $\underline{\text { every }}$ |
| $9^{*}$ | le/ | ate |
| $10^{*}$ | li/ | eat |

## Vowel Mapping Exercise:

Use 5-note scales (up and down on each vowel. Practice in low, middle and high registers, modifying close vowels* by dropping your jaw. (Maintain tongue shape as you drop jaw.)

Practicing in vowel order:

| Set 1 : (Position) | $\begin{aligned} & \text { /u/ } \\ & 2 \end{aligned}$ | $\begin{aligned} & \text { /0/ } \\ & 3 \end{aligned}$ | $\begin{aligned} & 10 / \\ & 4 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Set 2 | la/ | /I/ | /æ/ |
| (Position) | 5 | 6 | 7 |
| Set 3: | $\mid \varepsilon /$ | /e/ | /i/ |
| (Position) | 8 | 9 | 10 |



## Second Formant Vowel "Placement" Sensations

Bozeman, Kenneth, Practical Vocal Acoustics: Pedagogic Applications for Teachers and Singers (Hillsdale, NY: Pendragon Press, 2013) Contact: kenneth.w.bozeman@lawrence.edu Website: http://faculty.lawrence.edu/bozemank/ Webpage: http://www.kenbozeman.com/

When the shape of the tongue, lips and jaw are correct, the resonance of each vowel aligns with it's corresponding placement represented by the numbers in the illustration to the right. This is also where the lowest position of the tongue is for each vowel. The dip in the tongue serves to focus the resonance in the vocal tract and produces a stable tone with a synergistic balance between the breath, the vocal folds and vowel shape.


The following chart shows the places of articulation for many consonant sounds. Try pronouncing the words from left to right and see if you can feel where the sounds are being produced.


