Central Approximants

Consonants made with a relatively open vocal tract - usually not quite as open as in the “close” vowels. They are quite similar to vowels, and in many languages there is variation between approximant consonant and vowel.

Three central approximants of English:

- high front vowel [i] [j] palatal approximant
- high back vowel [u] [w] labio-velar approximant
- rhotic vowel [ɹ] [r] rhotic approximant

* Many thanks to Ian Maddieson who shared his teaching materials with me. These slides are adapted from his with minor changes.
Other approximants in the world’s languages are

- bilabial [β]  
  Spanish *la vaca* [laβaka] “the cow”

- labial-palatal [ŋ]  
  French *huit* [ŋit] “eight”

- post-alveolar or ‘retroflex’ [ɬ]

- velar [ɣ] or [ʁ]  
  Spanish *seguro* [seɣyro] “sure”

- uvular [ʁ]  
  French *creme* [kʁɛm] “cream”

- pharyngeal [ʃ]
The symbols for **bilabial** and **uvular approximants**, and often for velar, are the same as for the fricatives. To avoid ambiguity, the fricatives can be noted with the raising diacritic \[ \uparrow \] and/or the approximants with the lowering diacritic \[ \downarrow \]

**Fricatives**  \[ \beta \quad \gamma \quad \delta \quad \xi \]  

**Approximants**  \[ \beta \quad \gamma \quad \delta \quad \xi \]
Laterals

The vocal tract can be blocked in the center line but open laterally because the tongue is not making a seal at one or other of the sides.

The lateral opening can be narrow enough to create turbulence, or wide enough to produce an approximant sound. Hence there are lateral approximants and lateral fricatives.

The central blockage in a lateral sound can be anywhere between dental and velar.

A stop closure can be released by lowering one side of the tongue - hence lateral affricates with release to a lateral fricative position.
Laterals - some examples

Zulu

Voiced alveolar lateral approximant \[ \text{lálà} \] “sleep”

Voiced alveolar lateral fricative \[ \text{ínlá} \] “play”
\[ \text{ínínlá} \] “hunger”

Voiceless alveolar lateral fricative \[ \text{lânzà} \] “vomit”

Voiceless alveolar lateral affricate \[ \text{íntlántlà} \] “good fortune”

Velar lateral ejective affricate \[ \text{kì’íná} \] “be naughty”
Laterals - some examples

Tlingit

voiceless lateral affricates
  -- aspirated   t\textsuperscript{h}l   [t\textsuperscript{h}léeq\textsuperscript{w}]   “berries”
  -- unaspirated tl   [tłeet]   “snow”
  -- ejective    tl’    [tl’eeq]   “finger”

voiceless lateral fricatives
  -- plain       t’   [táχ’]   “heron”
  -- ejective    t’’   [t’’uuk]   “coho salmon”
Trills

A special class of sounds is produced by aerodynamically-driven vibration of one articulator against another within the oral cavity. Trilling does not involve separate muscle contractions for each vibration. The lips, tongue tip, and uvula can all be set in vibration if the position and the airflow conditions are right. It may also be possible to make the epiglottis vibrate.

Tongue tip trills are quite common; bilabial and uvular ones comparatively rare. Symbols for voiced trills: [b], [r], [R]

Trilling depends on very critical conditions being fulfilled. In everyday speech, trills often don’t have the multiple contacts of their canonical form.
Trills

Tongue tip trill [r] occurs in Spanish ‘perro’ [pero] “dog”

Careful Standard French or German may have uvular trills corresponding to orthographic “r”, especially in word-initial position:

French ‘rat’ [Ra] “rat”
German ‘Rat’ [Ra] “council”

Bilabial trills are mostly known from some Austronesian and African languages, e.g. Kele:

[mbulim] “face”
[mbuin] “vagina”
**Trills**

Symbols for trills:

<table>
<thead>
<tr>
<th></th>
<th>bilabial</th>
<th>alveolar</th>
<th>uvular</th>
</tr>
</thead>
<tbody>
<tr>
<td>voiced</td>
<td>v</td>
<td>r</td>
<td>R</td>
</tr>
<tr>
<td>voiceless</td>
<td>v̰</td>
<td>r̰</td>
<td>R̰</td>
</tr>
</tbody>
</table>

Voiceless trills are transcribed with the symbol for the voiced counterpart with the voiceless diacritic
Taps and flaps

Symbols:

<table>
<thead>
<tr>
<th>alveolar (tap)</th>
<th>post-alveolar (flap)</th>
</tr>
</thead>
<tbody>
<tr>
<td>voiced</td>
<td></td>
</tr>
<tr>
<td>r</td>
<td>t</td>
</tr>
</tbody>
</table>

Sounds made with a very quick movement of the articulators to a contact position are called ‘taps’ or ‘flaps’.

In a tap the movement is directly up and down, in a flap it is a passing movement usually from behind taps and flaps occur in many varieties of American English as the variant of /t/ before an unstressed syllable.
Taps and flaps

Examine your pronunciation of words like “potty” and “party”. For many speakers these words are [‘pari] (tap) and [‘paɾi] (flap).

These movies are from the UCLA Phonetics Lab web page.