Slide 9: Vowel Features – Height, Backness, Rounding

- **Height:** High (close) vowels like /i/ (as in *see*) have the tongue raised; low (open) vowels like /æ/ (as in *cat*) have the tongue lowered.
- **Backness:** Front vowels like /i, e, æ/ have the tongue forward; back vowels like /u, α, ɔ/ have the tongue retracted.
- **Rounding:** Lips may be rounded (e.g. /u, ɔ/) or unrounded (e.g. /i, e, æ/); this feature distinguishes some vowels.
- Vowel quality is defined by these features; for example, /i:/ is high-front-unrounded (like *sheep*), while /ɑ:/ is low-back-unrounded (like *car* in some accents).

Slide 10: English Short (Monophthong) Vowels

- English short vowels: /ɪ/, /e/, /æ/, /ʌ/, /ɒ/ (BrE) or /α/ (AmE), /ʊ/, /ə/.
- Examples:
- /ɪ/ as in *sit*
- /e/ as in bed
- /æ/ as in cat
- /n/ as in luck
- /p/ (or /q/) as in not
- /ʊ/ as in put
- /ə/ (schwa) as in the second syllable of comma
- Short vowels are typically shorter in duration and occur in stressed syllables (except schwa, which is unstressed).

Slide 11: English Long Vowels (Monophthongs)

- English long vowels (monophthongs with length): /i:/, /u:/, /a:/, /ɔ:/, /3:/ (BrE) or /3/ (AmE).
- Examples:
- /iː/ as in sheep (long "ee" sound)
- /uː/ as in food (long "oo" sound)
- /aː/ as in father (BrE "ar" sound)
- /ɔː/ as in saw (BrE "aw" sound)
- /3:/ as in bird (R-colored vowel in BrE; /3/ in AmE)
- Long vowels are held longer; in transcription they are often marked with a colon [:].

Slide 12: English Diphthongs

• **Diphthong:** A complex vowel that glides from one vowel quality to another within the same syllable.

- Major English diphthongs: /eɪ/ (face), /aɪ/ (price), /ɔɪ/ (choice), /əʊ/ (BrE go; AmE /oʊ/), /aʊ/ (mouth), plus centering diphthongs /ɪə/, /eə/, /ʊə/ (BrE) as in near, square, cure.
- In each diphthong, the tongue moves from the first vowel target to the second (e.g. /aɪ/ starts low-front /a/ and moves to high-front /ɪ/ as in *light*).
- Diphthongs contrast with monophthongs (e.g. /eɪ/ vs /e/).

Slide 13: English Triphthongs

- **Triphthong:** A glide through three vowel positions within one syllable (often a diphthong plus /ə/).
- Common in British English: /aɪə/ as in *liar/fire*, /aʊə/ as in *tower/power*, /ɔɪə/ in some pronunciations of *royal*.
- Example: the word liar may be pronounced /'laɪə/ with a triphthong /aɪə/.
- Triphthongs occur in rapid or careful speech; in casual speech they may simplify (e.g. *fire* may sound like /faɪə/).
- These three-part vowels highlight English's complex vowel system and often vary by dialect.

Topic 3: Consonant Sounds of English

Slide 14: Consonant Articulation Features

- **Place of articulation:** Where obstruction occurs (bilabial /p, b/, alveolar /t, d, s, z/, velar /k, g/, etc.).
- Manner of articulation: How airflow is modified (stop/plosive, fricative, nasal, lateral, etc.).
- **Voicing:** Whether vocal folds vibrate (/b, d, g/ voiced vs /p, t, k/ voiceless).
- The larynx (voice box) turns voicing on/off; voiceless consonants (fortis) often have more aspiration in English.

Slide 15: Plosive (Stop) Consonants

- Plosives involve complete closure of the vocal tract followed by release.
- English plosives: /p, b/ (bilabial), /t, d/ (alveolar), /k, g/ (velar).
- Voiceless plosives /p, t, k/ are aspirated [p^h, t^h, k^h] at word starts (e.g. *pin*, *top*, *cat*).
- Voiced plosives /b, d, g/ are typically unaspirated (e.g. bin, dog, gap).
- Fortis vs Lenis: Fortis plosives (/p, t, k/) have more energy; lenis (/b, d, g/) have less.

Slide 16: Fricative Consonants

- Fricatives: produced by forcing air through a narrow constriction, creating turbulence.
- English fricatives:

- /f, v/ (labiodental, as in fan, van)
- $/\theta$, δ / (dental, as in *think*, *this*)
- /s, z/ (alveolar, as in see, zoo)
- /ʃ, ʒ/ (post-alveolar, as in she, vision)
- /h/ (glottal fricative, as in hat; voiceless only).
- Voicing pairs: f/-/v/, $/\theta/-/\delta/$, /s/-/z/, /s/-/z/.
- Fricatives can be prolonged (e.g. /sɪz/ versus a quick stop /tɪt/).