

## Chapter 1

1.1. We say that German orthography is more transparent than English orthography. This means that it should be easier for you to spell the longest German word you know than the longest English word you know.

1.2.

a. [f] can be spelled with:

<f> as in <Film>

<ff> as in <Schiff>

<ph> as in <Philosophie>

<v> as in <vier>

b. Two or more letters that represent one sound: <sch>, <ch>, <ng>, <ie>, <ck>

c. In both of these examples, the single letter represents a combination of two sounds. The <z> in <Zunge> represents the affricate [ts], and the <x> in Hexe represents [ks].

1.3.

a. <ja> 2

b. <mich> 3

c. <finde> 5

d. <sang> 3

e. <Knie> 3

f. <Ruhe> 3

g. <Männer> 4

h. <Fisch> 3

i. <denken> 6

j. <Sitz> 4

1.4.

a. voiceless [f]

b. voiced [l]

c. voiced [b]

d. voiced [z]

e. voiceless [k]

f. voiced [m]

g. voiceless [ʃ]

h. voiced [v]

i. voiceless [t]

j. voiceless [h]

1.5.

a. voiced [ə]

b. voiced [m]

c. voiceless [x]

d. voiceless [k]

e. voiceless [s]

f. voiced [ŋ]

- g. voiceless [p]
- h. voiceless [t]
- i. voiceless [s]
- j. voiceless [ʃ]

1.6.

- a. [p] : [m] same, bilabial
- b. [d] : [l] same, alveolar
- c. [t] : [g] different, alveolar and velar
- d. [f] : [s] different, labiodental and alveolar
- e. [k] : [x] same, velar
- f. [b] : [ŋ] different, bilabial and velar
- g. [s] : [t] same, alveolar
- h. [p] : [v] different, bilabial and labiodental
- i. [k] : [ŋ] same, velar
- j. [n] : [ʃ] different, alveolar and postalveolar

1.7.

- a. [k] : [g] same, plosives
- b. [f] : [s] same, fricatives
- c. [g] : [ŋ] different, plosive and nasal
- d. [r] : [l] different, trill and lateral approximant
- e. [v] : [ʃ] same, fricatives
- f. [n] : [z] different, nasal and fricative
- g. [s] : [ç] same, fricatives
- h. [ʀ] : [ʁ] different, trill and fricative
- i. [m] : [ŋ] same, nasal
- j. [ʔ] : [x] different, plosive and fricative

1.8.

- a. voiceless plosives [p, t, k, ʔ]
- b. voiced plosives [b, d, g]
- c. nasals [m, n, ŋ]
- d. trills [r, ʀ]
- e. voiceless fricatives [f, s, ʃ, ç, x, h]
- f. voiced fricatives [v, z, ʒ, ʁ]
- g. approximants [j, l]
- h. bilabial [p, b, m]
- i. alveolar [t, d, n, r, s, z, l]
- j. velar [k, g, ŋ, x]
- k. postalveolar [ʃ, ʒ]
- l. labiodental [f, v]

1.9.

- a. voiceless velar plosive [k]
- b. voiced velar plosive [g]

- c. velar nasal [ŋ]
- d. voiced bilabial plosive [b]
- e. voiceless velar fricative [x]
- f. voiceless palatal fricative [ç]
- g. voiceless alveolar fricative [s]
- h. voiced alveolar fricative [z]
- i. alveolar trill [r]
- j. uvular trill [ʀ]
- k. lateral approximant [l]
- l. voiceless postalveolar fricative [ʃ]
- m. alveolar nasal [n]
- n. voiced palatal approximant [j]
- o. voiced uvular fricative [ʁ]
- p. voiceless alveolar plosive [t]
- q. voiced labiodental fricative [v]
- r. voiceless glottal fricative [h]

1.10.

- a. [j] Jahr
- b. [p] Post
- c. [z] Häuser
- d. [ŋ] fangen
- e. [x] Buch
- f. [v] Wort
- g. [ʃ] schlafen
- h. [ç] mich

1.11.

- a. [d] voiced alveolar plosive
- b. [m] bilabial nasal
- c. [k] voiceless velar plosive
- d. [v] voiced labiodental fricative
- e. [ʁ] voiced uvular fricative
- f. [j] palatal approximant
- g. [r] alveolar trill
- h. [ʃ] voiceless postalveolar fricative
- i. [ʔ] voiceless glottal plosive
- j. [s] voiceless alveolar fricative

1.12.

- a. [a:] (<Vater>) unrounded
- b. [u:] (<gut>) rounded
- c. [ɛ] (<Bett>) unrounded
- d. [œ] (<können>) rounded
- e. [y:] (<müde>) rounded
- f. [e:] (<Schnee>) unrounded

- g. [ʊ] (<muss>) rounded
- h. [ɔ] (<offen>) rounded
- i. [ɪ] (<Kiste>) unrounded
- j. [ʏ] (<Küste>) rounded

1.13.

- a. [i:] : [a:] (<Kiel>, <kahl>) different, high and low
- b. [u:] : [y:] (<Stuhl>, <Stühle>) same, high
- c. [u:] : [o:] (<tun>, <Ton>) different, high and mid
- d. [a:] : [ɛ:] (<sah>, <See>) different, low and mid
- e. [ʊ] : [ɔ] (<Schluss>, <Schloss>) different, high and mid
- f. [ɔ] : [œ] (<konnte>, <könnte>) same, mid
- g. [ɪ] : [ɛ] (<sitzen>, <setzen>) different, high and mid
- h. [ɔ] : [a] (<Tonne>, <Tanne>) different, mid and low
- j. [o:] : [e:] (<wo>, <Weh>) same, mid

1.14.

- a. high, tense vowels [i:, y:, u:]
- b. low vowels [a:, a]
- c. back vowels [u:, ʊ, o:, ɔ]
- d. front, unrounded vowels [i:, ɪ, e:, ɛ]
- e. high, front vowels [i:, y:, ɪ, ʏ]
- f. mid, front vowels [e:, ø:, ɛ, œ]
- g. mid, central vowels [ə, ɐ]
- h. front, rounded vowels [y:, ʏ, ø:, œ]

1.15.

- a. mid, back, lax, short, rounded vowel [ɔ]
- b. high, front, tense, long, unrounded vowel [i:]
- c. mid, front, lax, short, unrounded vowel [ɛ]
- d. low, central, short, unrounded vowel [a]
- e. high, front, tense, long, rounded vowel [y:]
- f. lower-mid, central, lax, short, unrounded vowel [ɐ]
- g. mid, front, tense, long, unrounded vowel [e:]
- h. high, front, lax, short, rounded vowel [ʏ]
- i. high, back, tense, long, rounded vowel [u:]
- j. mid, front, lax, short, rounded vowel [œ]

1.16.

- a. [a:] <Rad>
- b. [ɛ] <Bett>
- c. [ə] <Liebe>
- d. [ʊ] <Wurm>
- e. [ɔ̯] <Häuser>
- f. [ʏ] <Mütter>
- g. [ɔ] <voll>

h. [ø:] <schön>

1.17.

- a. [y:] high, front, tense, long, rounded vowel
- b. [i] high, front, lax, short, unrounded vowel
- c. [ʊ] high, back, lax, short, rounded vowel
- d. [œ] mid, front, lax, short, rounded vowel
- e. [ɛ] mid, front, lax, short, unrounded vowel
- f. [ə] mid, central, lax, short, unrounded vowel
- g. [a:] low, central, long, unrounded vowel
- h. [o:] mid, back, tense, long, rounded vowel
- i. [e:] mid, front, tense, long, unrounded vowel

1.18.

- a. [f v] labiodental
- b. [m n ŋ] nasal
- c. [ə ɐ a:] central
- d. [ʃ ʒ] postalveolar
- e. [u: ʊ o: ɔ] back
- f. [a a:] low
- g. [h ʔ] glottal
- h. [r ʀ] trill
- i. [i: ɪ y: ʏ u: ʊ] high
- j. [ɪ ʏ ʊ ɛ œ ə ɐ ɔ] lax