

Appendix B. “Sound Creatures” Catalog

Vowels

[ɑ] (as in father)

Name: Alita.

Legend: “Alita sings: [ɑ]-[ɑ]-[ɑ]”

Graphemes: A (father), O (fox, pot), E (genre)

Concept: Abraham Tena. **Design:** Ivan Sysoev. **Animation:** R Ryan Hayes.



[æ] (as in cat)

Name: Andy.

Legend: “Andy dislikes his food: [æ]”

Graphemes: A (cat)

Concept, design and animation: Ivan Sysoev.



[ʌ] (as in truck)

Name: Alex.

Legend: "Alex laughs: [ʌ]! [ʌ]! [ʌ]!" (a villainy kind of laughter)

Animation Description: Laughs hysterically while waving his hands or rocking from side to side

Graphemes: A (dataa), O (come), U (truck), TE (listen)

Inspiration: Dekodiphukan. **Design:** Ivan Sysoev.

Animation: Ivan Sysoev (A, O, U), Allan & Danny Gelman (TE)



[ɛ] (as in very)

Name: Eddy.

Legend: “Eddy struggles to hear: eh?”

Graphemes: E (very), A (care), U (bury)

Inspiration: Dekodiphukan. **Design and animation:** Ivan Sysoev.



[i] (as in squeak)

Name: Eve.

Legend: “Eve squeaks: eeeeeeee!!!” (after stepping into / touching something icky)

Graphemes: E (we), I (machine), Y (very)

Inspiration: Dekodiphukan. **Design and animation:** Ivan Sysoev.



[I] (as in hit)

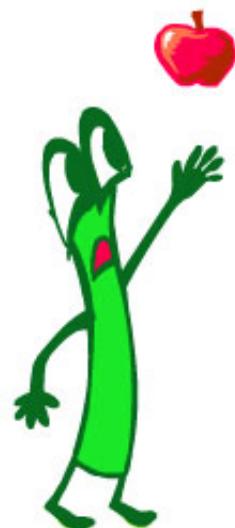
Name: Ines.

Legend: "Ines tries to reach: ih! Ih!" (while trying to pick a fruit)

Graphemes: I (hit), E (English), Y (system), U (business)

Concept and design: Ivan Sysoev. **Animation:** R Ryan Hayes (E, Y), Allan & Danny Gelman (I)

Note: The version for U is incomplete; showing a sketch here.



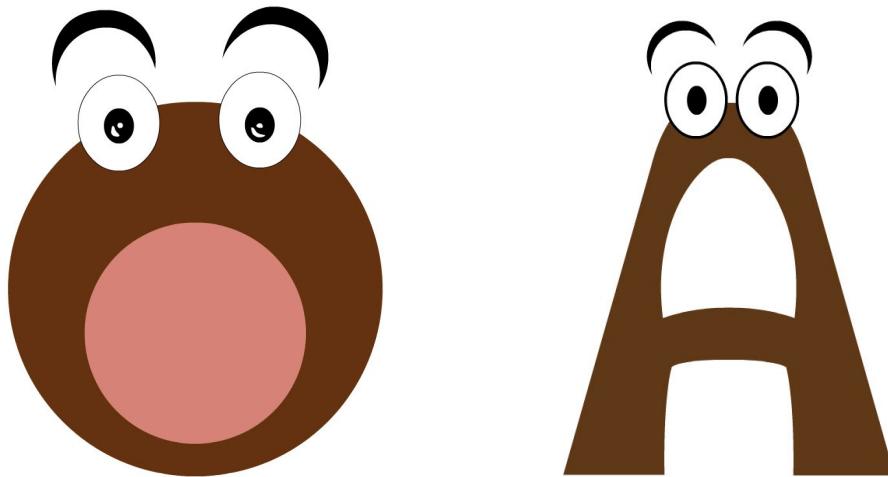
[ɔ] (as in long)

Name: Olaf.

Legend: “Olaf is surprised: ooooooooh!”

Graphemes: O (long), A (also)

Inspiration: Dekodiphukan. **Design:** Ivan Sysoev. **Animation:** Allan & Danny Gelman



[ou] (as in no)

Name: Owen.

Legend: “Owen sees that Oh[ou]! He’s late!”

Graphemes: O (no)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman



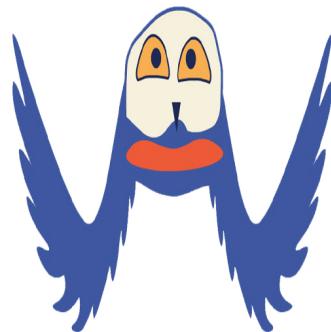
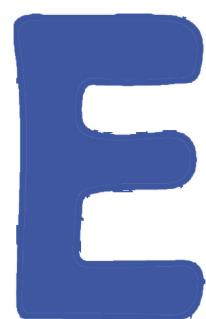
[u] (as in too)

Name: Uno.

Legend: "Uno hoots: Oo! Oo!"

Graphemes: OO (too), O (who), U (fluid), EW (crew)

Concept and design: Ivan Sysoev. **Animation:** Lingxi Li (U), Allan & Danny Gelman (O, OO, EW)



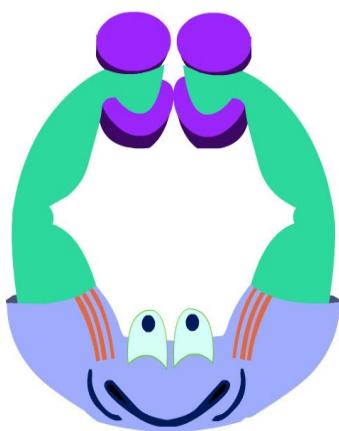
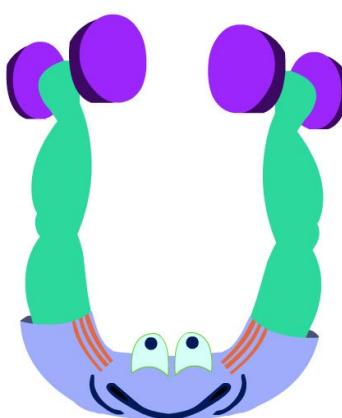
[ʊ] (as in put)

Name: Ulrich.

Legend: "Ulrich lifts weights: Uh! Uh!"

Graphemes: U (put), O (wolf)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman



[au] (as in c**ow**)

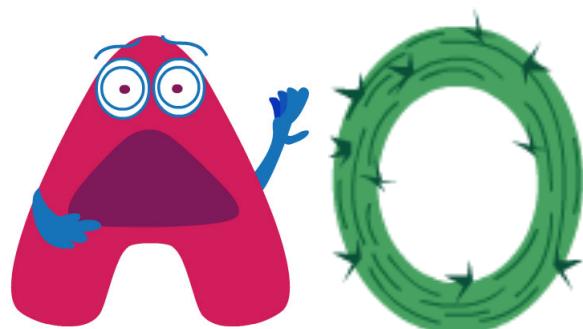
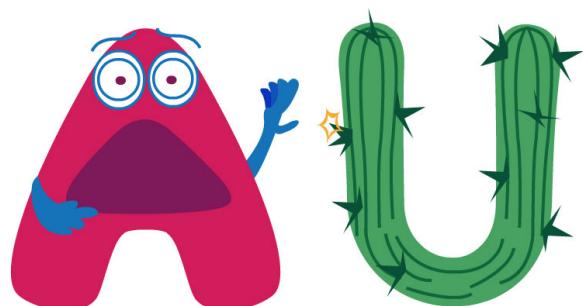
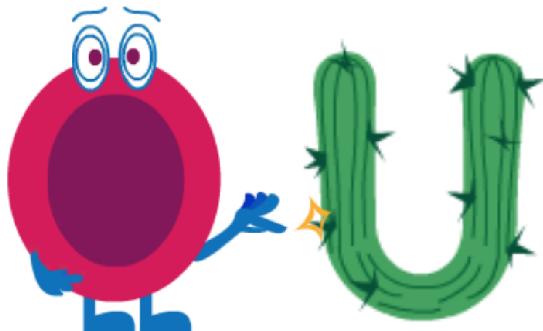
Name: Owli.

Legend: "Owli touches a cactus: Owl!"

Graphemes: OW (c**ow**), OU (out), AU (M**au**i), AO (T**ao**ism)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman

Note: The name is made-up. No real name starting with [au] was found.



[ai] (as in hi)

Name: Isaac.

Legend: “Isaac says: aye aye, captain!” (“Aye” sounds like [ai])

Graphemes: I (hi), Y (my)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman



[ei] (as in name)

Name: Abe.

Legend: “Abe waves to a friend: Eyi!”

Graphemes: A (name), E (cafe)

Concept, design and animation: Ivan Sysoev.



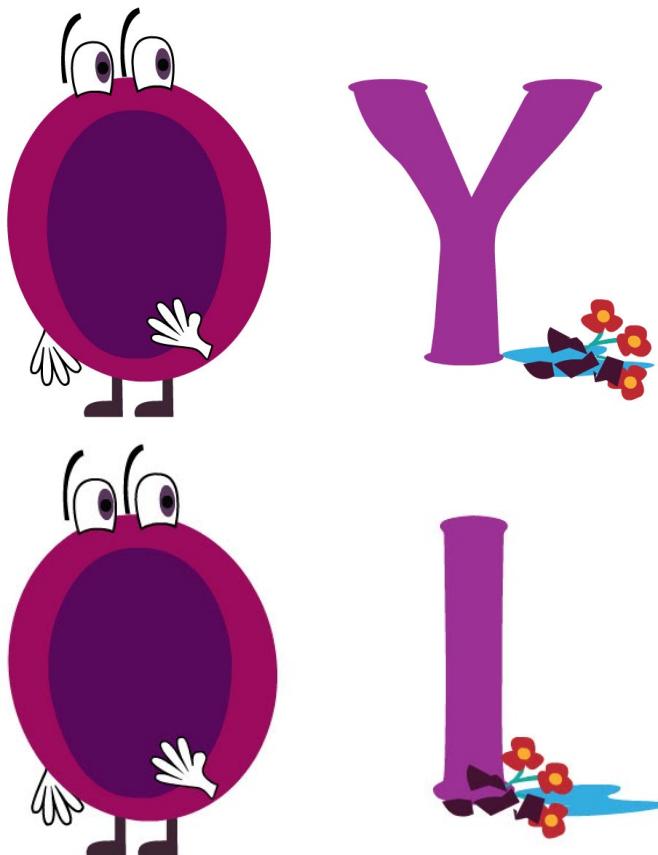
[ɔɪ] (as in boy)

Name: Oin.

Legend: “Oin drops a vase: Oy!”

Graphemes: OY (boy), OI (point)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman



r-colored vowel [ɜː] (as in fur)

Name: Ernie.

Legend: “Ernie ribbets: Er! Er!”

Graphemes: any vowel + R (fur, circle, work, etc.)

Concept and design: Ivan Sysoev.

Animation: Allan & Danny Gelman

Note: All r-colored vowels in CMU pronouncing dictionary are coded by the same symbol. R-colored vowels are specific for North American English. For learning purposes, it might be more natural to ignore r-coloring and decouple the vowel from R. This would alleviate the problem of children typically confusing this creature with the one for [r].



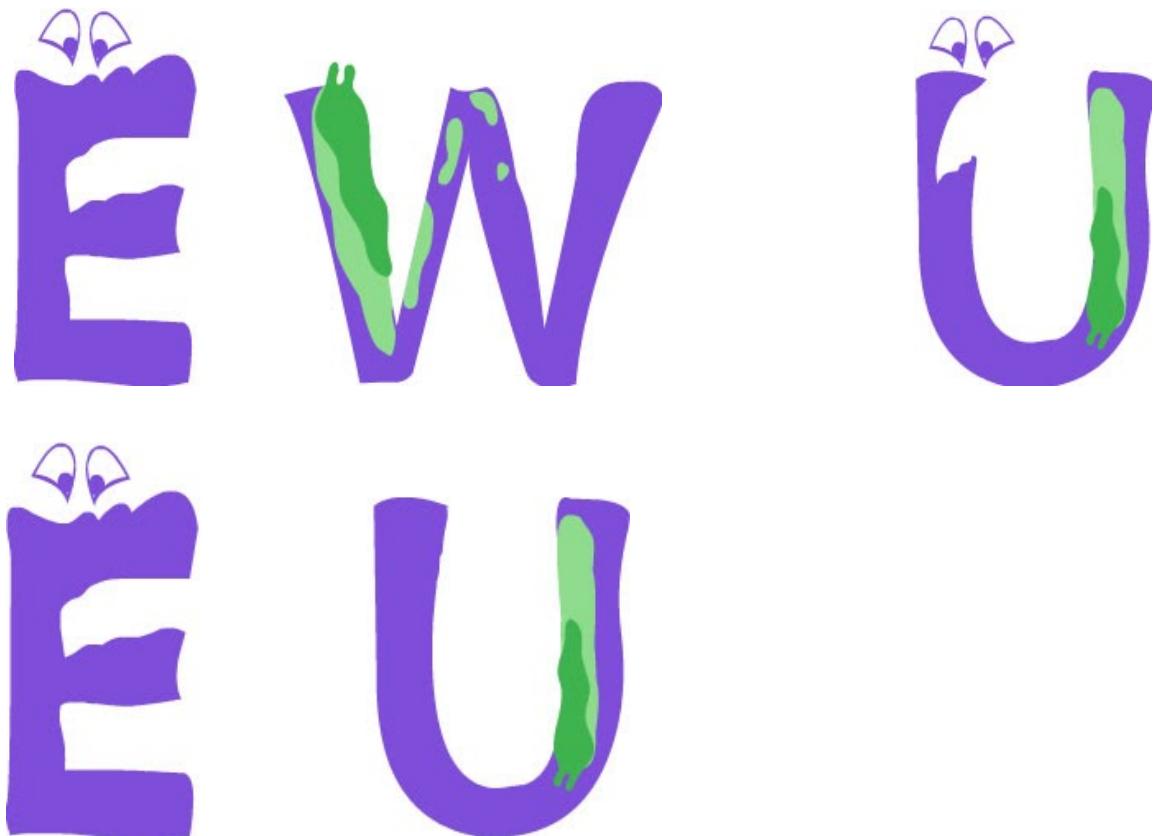
[ju] (as in new)

Name: Eugene.

Legend: "Eugene is disgusted: Ew!"

Graphemes: U (use), EU (Europe), EW (new)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman



Consonants

[b] (as in ball)

Name: Billy.

Legend: “Billy bounces a ball: b! b! b!”

Graphemes: B (ball)

Concept and design: Ivan Sysoev.

Animation: R Ryan Hayes



[d] (as in drum)

Name: Dan.

Legend: “Dan drums: d! d! d!”

Graphemes: D (drum)

Concept, design and animation: Ivan Sysoev.

Note: The choice of animal is not ideal: children were seen using the rebus principle and thinking that this is a RABBIT for [r].

[g] (as in gulp)

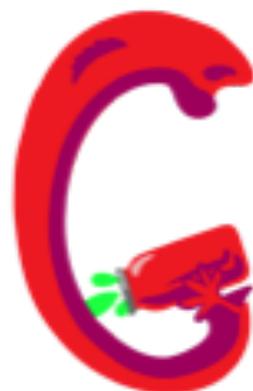
Name: Greg.

Legend: “Greg gulps grape juice: g! g! g!”

Graphemes: G (gulp)

Inspiration: Dekodiphukan

Design and animation: Ivan Sysoev.



[f] (as in fox)

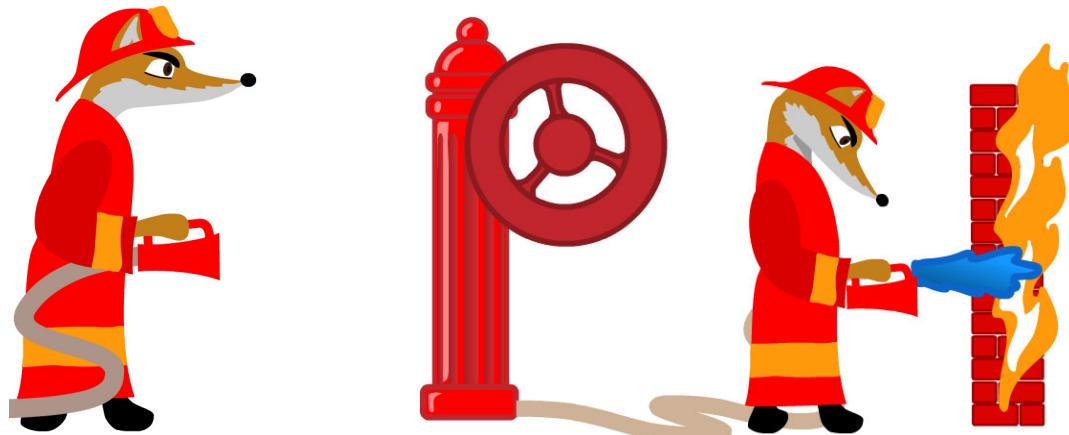
Name: Fred.

Legend: “Fred fights fire: ffffff!” (the sound of water rushing out of the hose)

Graphemes: F (fox), PH (phone)

Inspiration: Dekodiphukan

Design: Ivan Sysoev. **Animation:** Ivan Sysoev, **later modified by** R Ryan Hayes



[k] (as in kite)

Name: Kathy.

Legend: “Kathy does karate kicks: k! k! k!”

Graphemes: K (kite), C (cat), Q (queen)

Inspiration: Leapfrog

Design: Ivan Sysoev. **Animation:** R Ryan Hayes

Note: Kathy is a coyote.





[h] (as in house)

Name: Henry and Harry.

Legend: “Henry and Harry are blowing on hot food: hhhh! hhhh!”

Graphemes: H (house)

Inspiration: Dekodiphukan

Design and animation: Ivan Sysoev.

Note: The pizza that the characters are holding was a distraction for many children, making them think that the associated sound must be somehow connected to pizza (e.g. [p]).

[l] (as in lion)

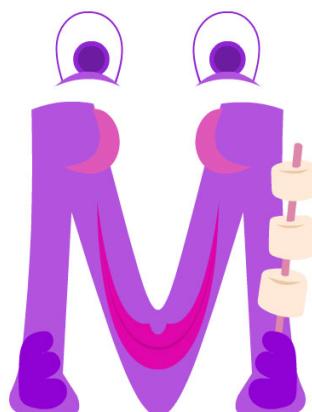
Name: Leo.

Legend: “Leo uses a forklift: LLL! LLL!”

Graphemes: L (lion)

Concept: Anneli Hershman

Design and Animation: Ivan Sysoev.



[m] (as in mouse)

Name: Mary.

Legend: “Mary munches on a marshmallow: mmmmmmm!!” (enjoys the marshmallow)

Graphemes: M (mouse)

Inspiration: Dekodiphukan

Design: Ivan Sysoev.

Animation: R. Ryan Hayes

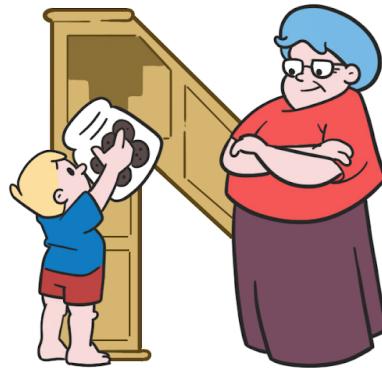
[n] (as in no)

Name: Nana.

Legend: “Nana says: No-no-no!” (to a boy who is trying to get sweets without permission)

Graphemes: N (no)

Concept, design and animation: Abraham Tena.



[p] (as in pop)

Name: Paul.

Legend: “Paul pops his bubblegum: p! p!”

Graphemes: P (pop)

Inspiration: Leapfrog.

Design and Animation: R. Ryan Hayes

[r] (as in roar)

Name: Rex.

Legend: “Rex roars: RRRRR!”

Graphemes: R (roar)

Concept: Ivan Sysoev.

Design and animation: R. Ryan Hayes

Note: Rex was originally a tiger (which ends with [r]). However, it turned out that children think that tiger says “Gurr”, while roaring is culturally associated with lions.



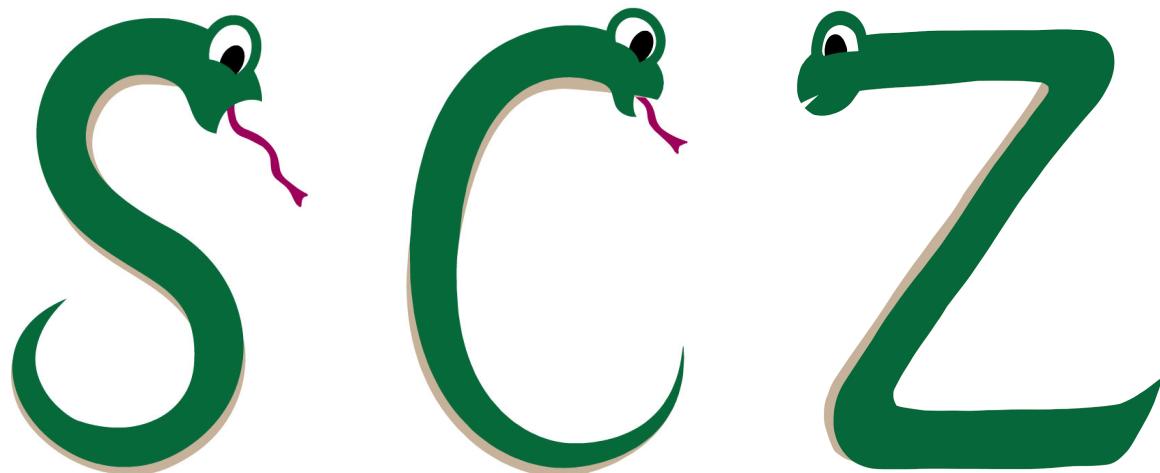
[s] (as in snake)

Name: Sally.

Legend: “Sally hisses: sssss!”

Graphemes: S (snake), C (city), Z (Switzerland)

Concept and design: Ivan Sysoev. **Animation:** Ivan Sysoev (S, C), Jesso Wang (Z)



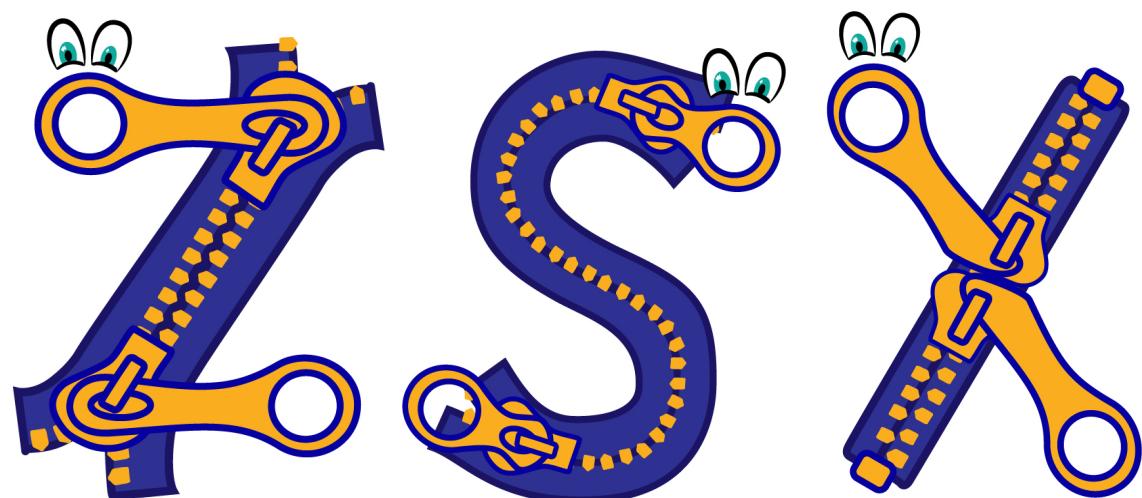
[z] (as in zipper)

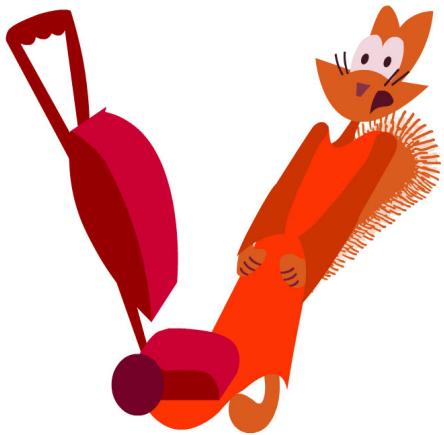
Name: Zack.

Legend: “Zack zips: zzzz! zzzz!”

Graphemes: Z (zipper), S (use), Z (Xerox)

Concept and design: Ivan Sysoev. **Animation:** Ivan Sysoev (Z), Jesso Wang (S, X)





[v] (as in vacuum)

Name: Vinny.

Legend: “Vinny got caught in a vacuum: vvvvvv!” (the sound of the vacuum)

Graphemes: V (vacuum)

Concept and design: Ivan Sysoev.

Animation: Allan & Danny Gelman

[t] (as in tap)

Name: Tommy.

Legend: “Tommy taps: t-t-t-t!”

Graphemes: T (tap)

Inspiration: Lively Letters

Design and animation: Ivan Sysoev.



[ks] (as in foX)

Name: Xenia.

Legend: “Xenia takes an X-ray: ks! ks!”
(the sound of the camera)

Graphemes: X (fox)

Inspiration: Dekodiphukan

Design and animation: Ivan Sysoev

[ʃ] (as in **shark**)

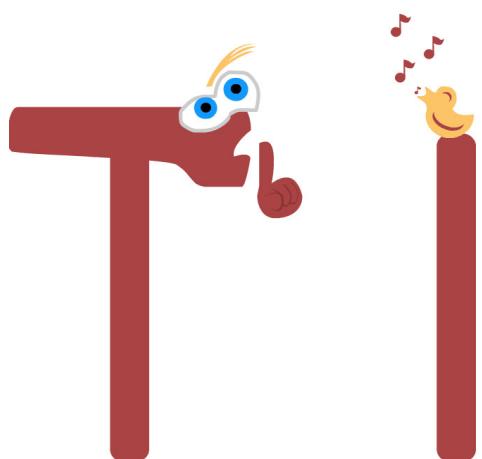
Name: Sharon.

Legend: "Sharon shushes: shhhh!"

Graphemes: SH (**shark**) or SI (expansion) or S (**sure**), TI (**nation**), CI (**social**) or CH (**chicago**)

Inspiration: Reading Genie

Design: Ivan Sysoev **Animation:** Allan & Danny Gelman



[ʒ] (as in measure)

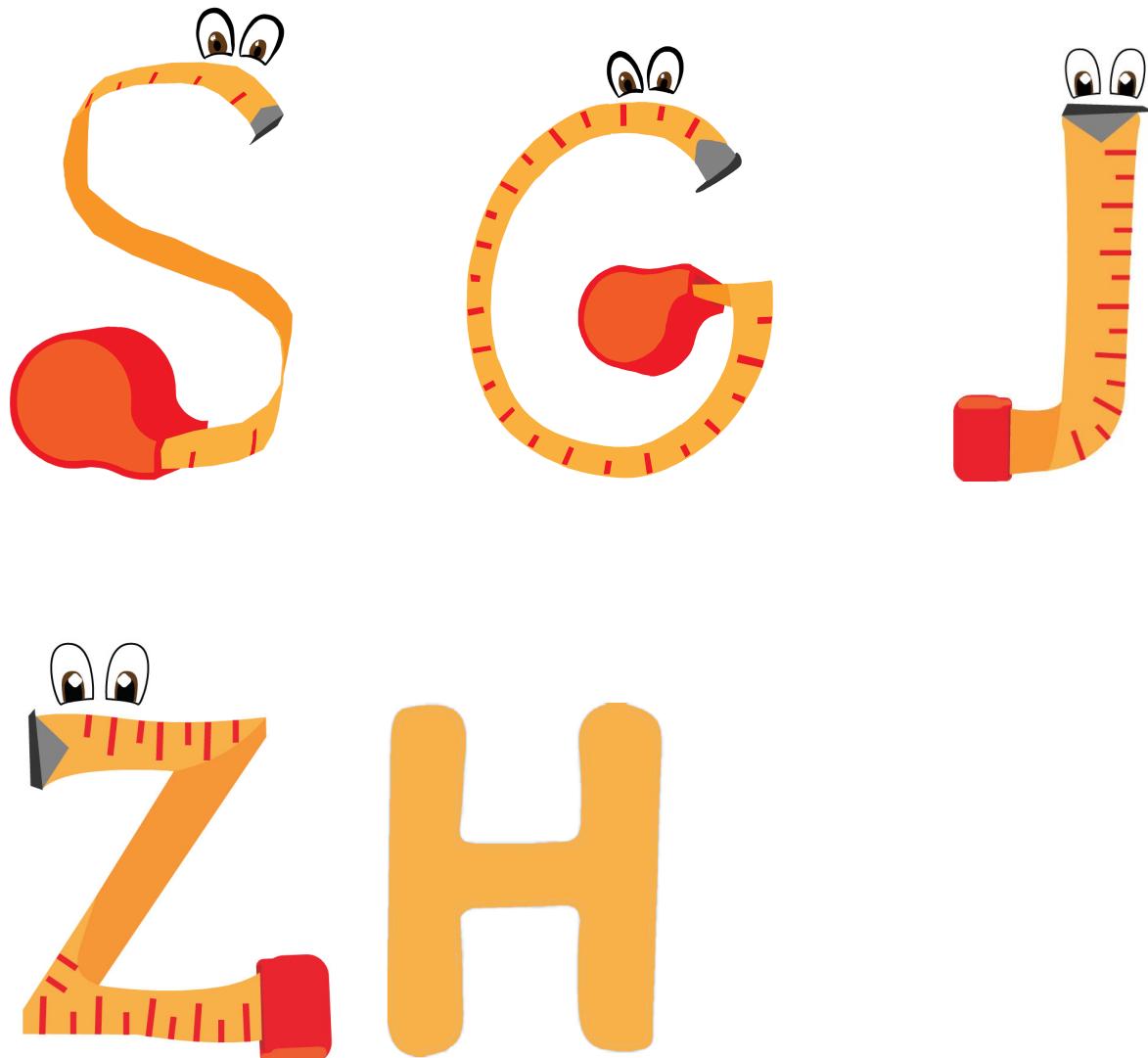
Name: Jacques.

Legend: “Jacques measures: zhhh! zhhh!” (the sound of measuring tape pulled out of its case)

Graphemes: S (treasure), G (regime), J (Jacques), ZH (Zhao)

Concept and design: Ivan Sysoev

Animation: Jesso Wang (Z, G), Allan & Danny Gelman (J, ZH)



[dʒ] (as in jump)

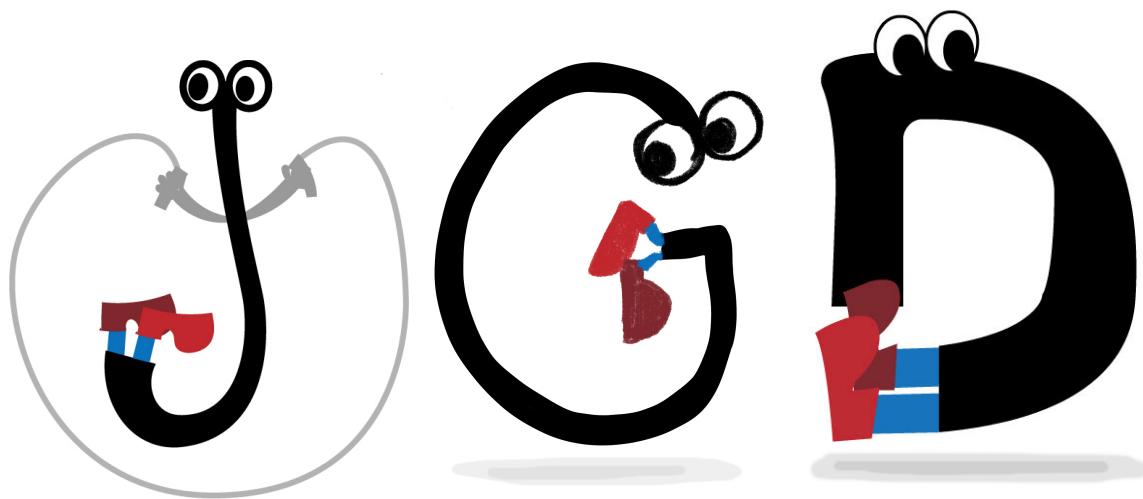
Name: Jim.

Legend: "Jim jumps: [dʒ]-[dʒ]-[dʒ]-[dʒ]!"

Graphemes: J (jump), G (general), D (education)

Inspiration: Leapfrog

Design: Ivan Sysoev. **Animation:** Jesso Wang (J, G), Allan & Danny Gelman (D)



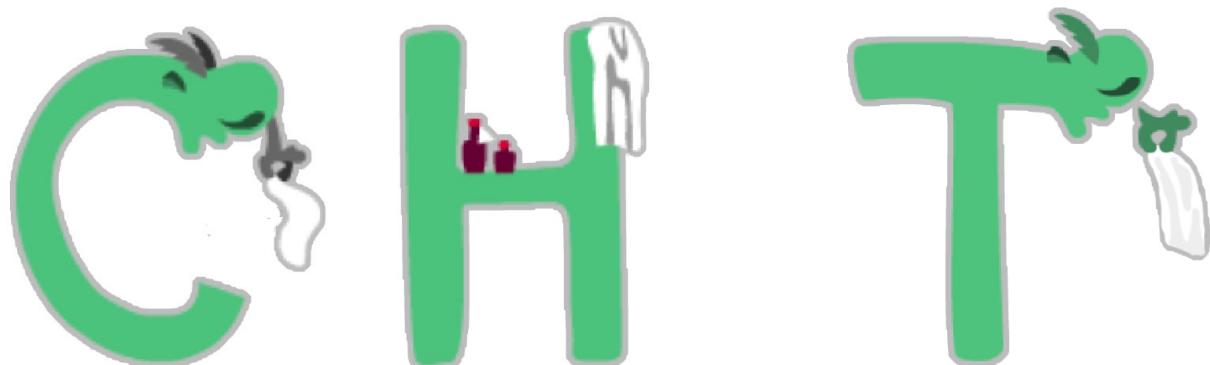
[tʃ] (as in chicken)

Name: Chuck.

Legend: "Chuck sneezes: [tʃ]! [tʃ]!"

Graphemes: CH (chicken) or C (cello), T (nature)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman.



[θ] (as in thing)

Name: Theo.

Legend: “Theo sneaks: [θ]! [θ]!” (the sound of soft footsteps)

Graphemes: TH (thing)

Inspiration: Reading Genie

Design: Ivan Sysoev. **Animation:** Allan & Danny Gelman.



[ð] (as in this)

Name: Thayn.

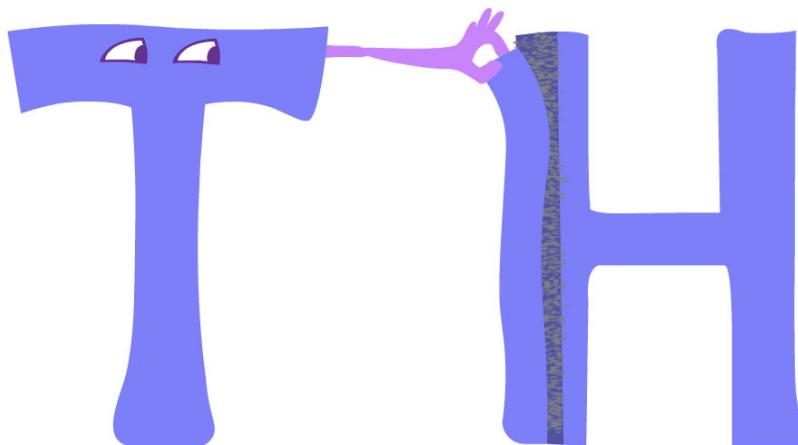
Legend: “Thayn peels velcro: [ð]! [ð]!”

Graphemes: TH (this)

Inspiration: Reading Genie

Design: Ivan Sysoev. **Animation:** Allan & Danny Gelman.

Note: The Thayn name is made up. I was unable to find a real name starting with [ð].



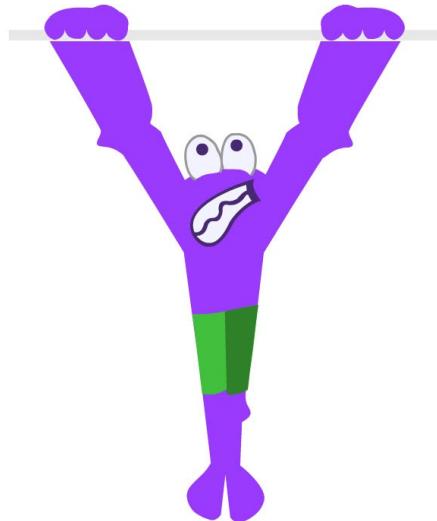
[j] (as in **yoga**)

Name: Yorick.

Legend: “Yorick struggles with pullups: [j]! [j]!” (a struggling sound)

Graphemes: Y (**y**oga)

Concept and design: Ivan Sysoev. **Animation:** Allan & Danny Gelman.



[w] (as in **wave**)

Name: Willie.

Legend: “Willie the boomerang spins: w-w-w-w!” (the sound of boomerang flying through the air)

Graphemes: W (**w**ater), U (**q**ueen)

Concept and design: Ivan Sysoev **Animation:** Jesso Wang



[ŋ] (as in king)

Name: Ngazi.

Legend: “Ngazi plucks a string: ng! ng!” (the sound produced by the string)

Graphemes: NG (king)

Concept, design and animation: Ivan Sysoev

Note: Ngazi is a made-up name. An alternative is Ting - a real name that ends with [ŋ].

