

MLAG ON-WORDS[®] Tournament Rules 2019-20

I. Starting a Match (Round)

A. Two- or three-player matches will be played. A *match* is composed of one or more shakes. A *shake* consists of a roll of the cubes and the play of the game ending with at least one player attempting to write a *Solution* consisting of a word or network of words that correctly uses the cubes on the playing mat and has a value that is equal to the Goal.

B. The following equipment is needed to play the game:

1. 31 cubes (with only the letters listed on each color cube):

6 black (E, I, N, O, R, T)

4 blue (A, C, D, E, L, S)

4 red (A, F, H, M, P, U or C)

3 green (B, E, G, T, V, W)

2 pink (I, N, O, R, S, Y)

2 yellow (J, K, Q, X, Y, Z)

3 digit cubes

Comment The digit cubes are used only in setting the Goal.

7 orange phonetics cubes (including h, ô, t, s, ou, n, d)

2. A playing mat: this contains four sections.

a. Goal: digit cubes played here form the Goal.

b. Required: all cubes played here *must* be used in any Solution.

c. Permitted: any or all cubes played here *may* be used in any Solution.

d. Forbidden: *no* cube played here may be used in any Solution.

Comment Many game boards have a section labeled "Resources." However, any reference in these rules to the "playing mat" or the "mat" does not include the Resources section.

3. A one-minute sand timer: this is used to enforce time limits.

4. A challenge block: this is a cube or similar object, not a flat object such as a coin. It should not be so large that two players can grab it at the same time.

C. Players may use only pencils or pens and blank paper. No prepared notes, books, tables, cell phones, or other electronic devices may be used.

In Minor, Elementary and Middle Divisions, players may use a preprinted chart for recording the Resources, Goal and Solutions.

D. The Goal-setter for the first shake is determined by lot. On each subsequent shake, the Goal-setter is the player immediately to the *left* of the previous Goal-setter.

To determine the first Goal-setter, each player rolls a digit cube. The player rolling the highest digit sets the first Goal. Players tied for high digit roll again until the tie is broken.

II. Starting a Shake

A. To begin a shake, the Goal-setter rolls all 31 cubes. The symbols on the top faces of the rolled cubes form the *Resources* for the shake.

1. A shake begins as soon as the timing for rolling the cubes is started or the cubes are rolled.

2. **During a shake, no player may turn over a cube or obstruct the other players' view of any cube.** (See Section VIII-C.)

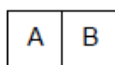
III. Setting the Goal

- A.** The player who rolls the cubes must set a Goal by transferring the cube(s) of the Goal from Resources to the Goal section of the playing mat.
- B.** A Goal consists of at least one and at most *three* digit cubes that form an expression that names a whole number.
1. On each shake, the goal must equal 3 or greater. A goal less than 3 is impossible and should be challenged Impossible.
 2. If more than one cube is used to set the Goal, the way the cubes are placed in the Goal determines the Goal's value.
 - a. The sum of two numbers is indicated by placing the cubes in a horizontal line (side by side).
 - b. The product of two numbers is indicated by placing the cubes in a vertical line.
 - c. The negative of a number is indicated by placing the cube so that its numeral is upside-down.
 3. The following are the only legal configurations of the cubes for the Goal. Any other configuration is incorrect and a player should challenge Impossible.

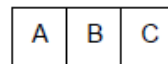
Comment Any digit cubes not used in the Goal must be placed in Forbidden, since they are not used in Solutions.



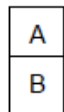
A



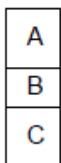
A + B



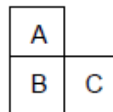
A + B + C



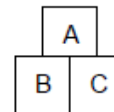
A X B



A X B X C



(A X B) + C



(B + C) X A

4. Once a digit cube touches the Goal section of the mat, it must be used in the Goal.
 - a. The Goal-setter indicates the Goal has been set by saying "Goal."
 - b. The Goal-setter may rearrange or regroup the cubes in the Goal section until he says "Goal."
 - c. If the time runs out for setting the Goal or the setter turns the timer, it has been set.
 - d. The Goal may not be changed once it has been set.
- C.** Before moving the first digit cube to the Goal section of the mat, the Goal-setter may make a *bonus move*.
1. To make a bonus move, the Goal-setter must say "Bonus," then move one non-digit cube from Resources to Forbidden, and then set the Goal.
- D.** If the Goal-setter believes no Goal can be set that has at least one correct Solution (see Section VI), he may declare "No Goal." Opponents have one minute to agree or disagree with this declaration.
1. If all players agree, that shake is void and the same player repeats as Goal-setter

for a new shake.

Comments

- (a) The Goal-setter would declare “No Goal” only in those rare instances when an unusual set of Resources was rolled where no word could be formed.
 - (b) Players receive no points for the void shake.
 - (c) If the Goal-setter makes a Bonus move, he is committed to setting a goal and may not declare “No Goal”
2. An opponent who does not agree with the “No Goal” declaration indicates disagreement by picking up the challenge block (see Section **V-B**) and challenging the “No Goal” declaration. She then has two minutes to write a legal Goal and a correct Solution. If there is a Third player, he also can choose to write a Solution. The Challenger and Third Party may use as many cubes from Resources as needed for the Solution. In this instance, the Challenger and Third Party must write the configuration of the digits for the Goal; for example 3Z or an L-shape or upside-down T. Scoring for this Challenge is as follows: .:
- If the Challenger presents a correct Equation, he scores 6. If the Challenger’s Equation is incorrect, he scores 2.
 - If the Third Party presents an incorrect Equation, she scores 2. If the Third Party presents a correct Equation, she scores 4. If the Third Party does not present an Equation, she scores 6 if the Challenger’s Equation is incorrect or 2 if the Challenger’s Equation is correct.
 - If either the Challenger or the Third Party presents a correct Equation, the original Goal-setter scores 2. If neither the Challenger nor the Third Party presents a correct Equation, the original Goal-setter scores 6.

IV. Moving Cubes

- A. After the Goal has been set, play goes in a clockwise direction (to the left).
- B. When it is your turn to play, you must either move a cube from Resources to one of the three sections of the playing mat (Required, Permitted, Forbidden) or challenge the last Mover.

The move of a cube is completed when it touches the mat. Once a cube is legally moved to the mat, it stays in the section where it was played for the duration of the shake.

- C. Any player may make a bonus move before making a regular move. To make a bonus move, the Mover must say “Bonus,” then move one cube from Resources to Forbidden, and then move another cube to Forbidden, Permitted or Required.

Comments

- (a) If you do not say ‘Bonus’ before moving the first cube to Forbidden, the move does not count as a bonus move but as a regular move to Forbidden. You are not entitled to play a second cube.
- (b) When making a bonus move, the first cube *must* go to Forbidden. The second (bonus) cube may be moved to Required, Permitted, or Forbidden.

V. Challenging

- A. Whether or not it is your turn, you may challenge another player who has just completed a move or set the Goal. The two main challenges are Now and Impossible.

Note: Players may also challenge a “No Goal” call, see Section **III-D-2**.

- 1. By challenging *Impossible*, a player claims that no correct Solution can be written regardless of how the cubes remaining in Resources may be played.

Comments

- (a) If the Goal is not in a legal configuration (see Section **III-B-3**) or the Goal equals a number less than three, an opponent should challenge Impossible.

(b) A Player who challenges “Never” will be considered to have challenged “Impossible”. There will be no penalty for saying “Never” instead of “Impossible”

2. By challenging *Now*, a player claims that a correct Solution can be written using the cubes on the mat and, if needed, *one* cube from Resources. A player may challenge *Now* if all of the cubes of her Solution are in Required or Permitted.

a. A player may challenge *Now* only if there are at least two cubes in Resources.

If a player challenges *Now* with fewer than two cubes in Resources, the challenge is invalid and is set aside. (See Sections VII and VIII below.)

Comment If only one cube remains in Resources and no one challenges Impossible, then a Solution is possible using that one cube. Since the latest Mover had no choice but to play the second-to-last Resource cube to the mat, it is not fair that he be subject to a *Now* challenge. (However, an Impossible challenge could be made.) See Section VII for the procedure to be followed when one cube remains in Resources.

b. Since a correct Solution must contain at least **three** cubes, it is illegal to challenge *Now* after the Goal has been set but before **two** total cubes have been played to Required and/or Permitted.

If a player does so, the challenge is set aside and play continues.

B. A challenge block is placed equidistant from all players. To challenge, a player must pick up the block and say “*Now*” or “*Impossible*.”

A player who picks up the block and makes a challenge against himself is not penalized and the challenge is set aside.

Comments

(a) The purpose of the block is to determine who the Challenger is in a shake.

(b) Touching the challenge block has no significance. However, players may not keep a hand, finger, or pencil on, over, or near the block for an extended period of time. (See Section VIII-C.)

(c) A player must not pick up the challenge block for any reason except to challenge. For example, don't pick it up to say “*Goal*” or to charge illegal procedure or when fewer than two cubes remain in Resources.

VI. Writing and Checking Solutions

A. After a valid challenge, at least one player must write a Solution.

1. After a *Now* challenge, the Challenger must write a Solution. (The Mover may not present a Solution.)

2. After an Impossible challenge, the Mover must write a Solution. (The Challenger may not present a Solution.)

3. After any challenge in a three-player match (and before any Solution is presented), the Third Party must indicate **by the end of the two minutes for writing Solutions** whether she is presenting a Solution. The Third Party may not retract her decision once she has indicated whether or not she will present a Solution.

Comment To indicate his intention on the challenge, the Third Party may:

(a) state whether or not he will present a Solution;

(b) indicate which party, Mover or Challenger, the Third Party is “joining” (agreeing with) on the challenge. This can be done verbally or by pointing to the party.

(c) present or not present a Solution when the time limit for writing Solutions expires. If the Third Party does not present a Solution, she is assumed to be joining the player who is not writing a Solution (Challenger on an Impossible or Mover on a *Now*).

B. To be *correct*, a Solution must be a word or network of words that satisfies the following criteria:

1. The Solution equals the Goal. That is, value of the Solution equals the Goal.

Comment

Unlike *Equations*, the Solution-writer must *not* write “= Goal” after the Solution.

2. The Solution uses the cubes correctly.
 - a. The Solution contains at least *three* cubes.
 - b. The Solution uses *all* the cubes in Required.
 - c. The Solution may use one or more cubes in Permitted.
 - d. The Solution uses *no* cube in Forbidden.

Comment Since several Resource cubes may show the same symbol, it is possible to have an E in Forbidden that must *not* be used in the Solution at the same time that there is an E in Required that *must* be used.

- e. After a Now challenge, the Solution must contain *at most one* cube from Resources. This means a Solution must need one more (or zero more) cube from Resources.
 - f. After an Impossible challenge, any cubes in Resources are considered to be in Permitted and therefore may be used in the Solution.
3. The Solution may consist of either a single word or a network of words that have one or more letters in common.
 - a. The official dictionary of ON-WORDS is Merriam Webster’s online Unabridged Dictionary (dictionary.eb.com). The most recent printed version of *Webster’s Third International Unabridged (2002)* may be used if the online dictionary is unavailable. Only words in this dictionary and those on the MLAG Official Two-Letter Word List are legal words. For two-letter words, only those on the Official MLAG Two-Letter Word List are permitted. The Official Scrabble Players Dictionary will be used to check for foreign words.
 - b. All words must be 2 or more letters in length.
 - c. Contractions, abbreviations, proper names, words marked as foreign, obsolete, slang or archaic or hyphenated words are not allowed unless they are on the MLAG Official Two-Letter Word List.
 - d. Phonetics cubes represent the phonetics usage in the manual accompanying the game. They are to be used as constraints on the sounds contained in the words in the Solutions. The phonetic cubes may not be used as letters to spell words in the Solutions.
 - e. If the solution-checker is in doubt regarding the spelling or pronunciation of a word, s/he may call a judge to verify the word. Each player may only ask the judge to verify one word per shake.
 - f. Required phonetic cubes need only be used once in the solution. Forbidden phonetics cubes are forbidden from being used in any word in the solution.
 - g. The only allowed pronunciations of a word are those that are listed first for each entry in Merriam Webster’s online Unabridged Dictionary (dictionary.eb.com) or are listed on the MLAG Official Two-Letter Word List.
 - h. If there is more than one correct pronunciation of a word, the pronunciation(s) that is/are assumed is/are the one(s) that make(s) the solution correct.

C. After the time for writing Solutions has expired (or when all Solution-writers are ready), each Solution that is presented must be checked for correctness.

1. All Solutions must be presented before any is checked.
 - a. Once a player presents a Solution to the opponent(s), she may make no further corrections or additions even if the time for writing Solutions has not expired.

- b. Each Solution-writer must indicate the Solution to be checked. A writer who forgets to indicate the Solution must do so when asked.
2. Opponents have two minutes to check each Solution. When more than one Solution must be checked, they may be checked in any order. In a three-player match, *both* opponents must check a player's Solution during the *same* two minutes. No other Solution should be checked during this time.

Comments

- (a) When both players in a two-way match present Solutions after the last cube has been moved (see Section VII below), only one Solution should be checked at a time.
 - (b) Players must not physically move the cubes in Required, Permitted, and Resources to form the Solution being checked. This causes arguments over where each cube was played.
3. Within the time for checking a Solution, opponents must accept or reject the Solution. A player who claims an opponent's Solution is not correct must show that it violates at least one of the criteria in Section VI-B or cite one of the reasons below. A Solution is correct if no opponent shows that it is incorrect.
- a. The Goal has no legal interpretation.

Examples

- (a) The Goal is in the shape of a backwards L, which is not a legal configuration.
 - (b) The Goal equals a number less than 3.
- b. The Solution equals a value that is not a legal value of the Goal.
 - (i) Checkers must make an effort to determine whether the Solution equals the Goal before rejecting the Solution. This can be done by counting the number of letters in the word or, for networks, the sum of the number of letters in each word in the network.
 - (ii) The checker can give a general argument that the Solution does not equal the Goal.
 - (iii) One or both of the checkers may ask a judge to determine whether the Solution equals the Goal. However, the checkers will be restricted in that **No further objections to the Solution will be allowed** even if the time limit for checking has not expired. If there are two checkers, both must agree that there are no other questions (cubes on the mat, procedures, etc.), as this is the final question that a judge will answer.
 - c. The Solution is not in a legal format (e.g., two separate networks...)
 - d. One or more of the words in the Solution is misspelled.
 - e. One of the words in the Solution contains a sound that is forbidden.
 - f. None of the words in the Solution contains a sound that is required.

VII. Last Cube Procedure

- A.** If one cube remains in Resources, the next Mover must either play that cube to Required or Permitted or challenge Impossible. When the cube has been moved, each player has two minutes to write a Solution.

The last cube in Resources may *not* be moved to Forbidden. If a player does so, any challenge that is made is set aside and the cube is returned to Resources. There is no penalty unless the player's time to move expires. (See Section X.)

- B.** An opponent may challenge Impossible against the player who moved the last cube from Resources to Required or Permitted, provided the challenge is made by the end of the

first minute for writing Solutions. If the challenge is made, the Mover (and the Third Party if siding with the Mover) has the rest of the original two minutes to write a Solution.

Comment Any Now challenge with one cube or zero cubes left in Resources is invalid, as is any Impossible challenge made after the first minute for writing Solutions. In both cases, the challenge is set aside and there is no point penalty.

VIII. Illegal Procedures

A. Any action that violates a procedural rule is an *illegal procedure*. A player charging illegal procedure must specify (within 15 seconds) the exact nature of the illegal procedure.

1. If a move *is* an illegal procedure, the Mover must return any illegally moved cube(s) to their previous position(s) (usually Resources) and, if necessary, make another move.

The Mover must be given at least 10 seconds to make this correction, unless the original move was made after the ten-second countdown (see Section **X-A-3** below), in which case the time-limit rule (Section **X-A**) is enforced. In general, there is no direct penalty except that the Mover may lose a point if he does not legally complete his turn during the time limit.

Examples of illegal procedures

Moving out of turn, moving two cubes without calling "Bonus" before the first cube touches the mat in Forbidden, moving the last cube in Resources to Forbidden.

2. If the move is *not* an illegal procedure, the cube stands as played.

Comment There is no penalty for erroneously charging illegal procedure. However, see Section **VIII-C** below if a player does so frequently.

B. An illegal procedure is *insulated* by a legal action (for example, a move or challenge) by another player so that, if the illegal procedure is not corrected before another player takes a legitimate action, it stands as completed.

Example Suppose a player makes an invalid bonus move (such as moving two cubes to Required). Before anyone notices the illegal procedure, the next mover moves (or a valid challenge is issued). Then the illegal bonus move stays without penalty.

C. Certain forms of behavior interfere with play and annoy or intimidate opponents. If a player is guilty of such conduct, a judge will warn the player to discontinue the offensive behavior. Thereafter during that round or subsequent rounds, if the player again behaves in an offensive manner, the head judge may penalize the player one point for each violation after the warning. Flagrant misconduct or continued misbehavior may cause the player's disqualification for that round or all subsequent rounds. The head judge may even decide to have the other two opponents replay one or more shakes or the entire round because play was so disrupted by the third party. In some cases, the head judge may order the shake replayed by all three players.

Examples This rule applies to constant talking, tapping on the table, humming or singing, loud or rude language, keeping a hand or finger over or next to the challenge block, making numerous false accusations of illegal procedure, and so on. It also includes not playing to win but rather trying only to ruin the perfect scores of one or both opponents (for example, by erroneously challenging Now or Impossible at or near the beginning of each shake so that both opponents will score 5 for the round), counting down the 10-second warning in an obnoxious manner, etc.

IX. Scoring a Shake

A. After a challenge, a player is *correct* according to the following criteria:

1. That player had to write a Solution and did so correctly.

If the Third Party agrees with the person who must write a Solution, the Third Party must write a correct Solution also.

2. That player did not have to write a Solution (someone else did), and no opponent wrote a correct Solution.

Exception: After a Challenge in a three-player match, a player who does not present a Solution for a shake scores 2 if he accepts another player's Solution as correct even if that Solution is subsequently proven wrong by the other checker.

- B.** After a challenge, points are awarded as follows:
 - 1. Any player who is not correct scores 2.
 - 2. Any player who is correct scores 6, unless that player is the Third Party agreeing with the Challenger, in which case the score is 4.
- C.** After the last cube from Resources is moved to the playing mat and no one challenges Impossible, points are awarded as follows:
 - 1. Any player who writes a correct Solution scores 4.
 - 2. Any player who does not write a correct Solution scores 2.
- D.** A player who is absent for a shake scores 0 for that shake.

X. Time Limits

- A.** Each task a player must complete has a specific time limit (listed below). The one- and two-minute time limits are enforced with the timer. If a player fails to meet a deadline, he loses one point and has one more minute to complete the task. If he is not finished at the end of this additional minute, he loses his turn or is not allowed to complete the task.

Note: In Minor, Elementary and Middle Divisions, each one-point penalty must be approved by a judge initialing the scoresheet.

- 1. The time limits are as follows:

- a. rolling the cubes and setting the Goal 2 minutes
- b. first turn of the player to the left of the Goal-setter 2 minutes
- c. all other regular turns (including any bonus moves) 1 minute
- d. stating a valid challenge after picking up the challenge block 15 seconds
- e. deciding whether to challenge Impossible when no more 1 minute cubes
remain in Resources

If an Impossible challenge is made, any time (up to a minute) that the Challenger took deciding to challenge counts as part of the two minutes for writing a Solution.

- f. writing a Solution 2 minutes

During this time, the Third Party (if there is one) must decide whether to present a Solution after a Now or Impossible challenge. At the end of these two minutes she must present her solution.

- g. deciding whether an opponent's Solution is correct 2 minutes

- 2. Often a player completes a task before the time limit expires. When sand remains in the timer from the previous time limit, the next player will receive additional time. An opponent timing the next player may either flip or not flip the timer so as to give the opponent the lesser amount of time before the remaining sand runs out and the next time limit can be started.

- 3. A player who does not complete a task before all the sand runs out for the time limit must be warned that time is up. An opponent must then count down 10 seconds loud enough for the opponent to hear. The one-point penalty for exceeding a time limit can be imposed only if the player does not complete the required task by the end of the countdown.

The countdown must be done at a reasonable pace; for example, "10-10, 10-09, ..., zero."

- B.** A round lasts a specified amount of time (usually 30 minutes). When that time is up,

players are told not to start any more shakes.

Players have five minutes to finish the last shake. After these five minutes, players still involved in a shake in which no challenge has been made and one or more cubes remain in Resources will be told: "Stop, don't move another cube – this is the end of the round. Each player has two minutes to write a correct Solution that may use any of the cubes remaining in Resources. Any player who presents a correct Solution scores 4 points for that shake; an incorrect Solution scores 2."

XI. Scoring a Match

- A.** Each player is awarded points for the match based on the sum of his scores for the shakes played during that match according to the following tables:

Three-Player Matches	Points
First place	6
Two-way tie for first	5
Three-way tie for first	4
Second place	4
Tie for second	3
Third place	2

Two-Player Matches	Points
First place	6
Tie for first	5
Second place	4

- B.** When a round ends, each player must sign (or initial) the scoresheet and the winner (or one of those tied for first) turns it in. If a player signs or initials a scoresheet on which his score is listed incorrectly and the error was a simple oversight, then, with the agreement of all players, correct the scores.

However, if there is evidence that there was intent to deceive and the error was not a simple oversight, then do the following:

1. If the error gives the player a lower score, she receives the lower score.
2. If the error gives the player a higher score, he receives 0 for that round.

Phonetics Symbols for On-Words

symbol sounds like the underlined part in:

ä.	<u>ah</u> , <u>cot</u> , <u>not</u> , <u>hoop<u>l</u>a</u> , <u>hurrah</u> , <u>alms</u> , <u>calm</u>
ǎ.	<u>attic</u> , <u>h<u>a</u>t</u> , <u>l<u>au</u>gh</u>
ā.	<u>aim</u> , <u>b<u>ai</u>t</u> , <u>ne<u>igh</u></u> , <u>s<u>ay</u></u> , <u>dat<u>e</u></u>
b.	<u>b<u>u</u>bble</u>
d.	<u>dog</u> , <u>rudder</u>
f.	<u>fit</u> , <u>ph<u>o</u>ne</u> , <u>taff<u>y</u></u> , <u>enough</u> , <u>graph</u>
ě.	<u>elm</u> , <u>met</u> , <u>dread</u> , <u>friend</u> , <u>genuine</u>
ē.	<u>eat</u> , <u>easy</u> , <u>feet</u> , <u>thief</u> , <u>deceive</u> , <u>me</u>
ə.	<u>above</u> , <u>opinion</u> , <u>opposition</u> , <u>circ<u>u</u>s</u>
g.	<u>get</u> , <u>wiggle</u> , <u>bog</u> , <u>rogue</u>
h.	<u>heat</u> , <u>h<u>e</u>n</u> , <u>wh<u>o</u></u>
k.	<u>keep</u> , <u>can</u> , <u>cake</u> , <u>quack</u> , <u>take</u> , <u>book</u>

ī.	<u>if</u> , <u>bit</u> , <u>myth</u>
ī.	<u>iris</u> , <u>find</u> , <u>sigh</u> , <u>sign</u> , <u>buy</u> , <u>by</u> , <u>pie</u>
p.	<u>pet</u> , <u>popped</u>
r.	<u>rat</u> , <u>rhythm</u> , <u>writer</u> , <u>merry</u> , <u>star</u> , <u>dare</u>
t.	<u>top</u> , <u>butter</u>
y.	<u>young</u> , <u>opinion</u>

ô.	<u>aw</u> , <u>caught</u> , <u>ought</u> , <u>haul</u> , <u>long</u> , <u>fall</u>
ō.	<u>oh</u> , <u>owe</u> , <u>loan</u> , <u>roe</u> , <u>sew</u>
ö.	<u>look</u> , <u>push</u> , <u>would</u> , <u>sugar</u>
ō.	<u>ooze</u> , <u>dude</u> , <u>do</u> , <u>you</u> , <u>blue</u>
th.	<i>thin</i> , <i>lengthy</i> , <i>breath</i> (italics, not underlined, for clarity)
th.	<u>the</u> , <u>father</u> , <u>breathe</u>

symbol sounds like the underlined part in:

l.	<u>let</u> , <u>lily</u> , <u>wallet</u>
m.	<u>moo</u> , <u>drummer</u> , <u>tomb</u>
n.	<u>need</u> , <u>gnome</u> , <u>knock</u> , <u>dinner</u>
ng.	<u>song</u> , <u>link</u> , <u>thinking</u>
ŭ.	<u>other</u> , <u>luck</u> , <u>above</u> , <u>blood</u> , <u>duh</u>
ū.	<u>use</u> , <u>you</u> , <u>few</u>
ch.	<u>achoo</u> , <u>chair</u> , <u>choose</u> , <u>witch</u>
i. = j.	<u>adjure</u> , <u>jail</u> , <u>jaw</u> , <u>gem</u> , <u>badger</u> , <u>fudge</u>
zh.	<u>azure</u> , <u>measure</u> , <u>rouge</u> , <u>azure</u> , <u>prestige</u>
sh.	<u>assure</u> , <u>shape</u> , <u>sugar</u> , <u>special</u> , <u>patience</u>
hw.	<u>wheat</u> , <u>when</u>
s.	<u>sewer</u> , <u>sit</u> , <u>cent</u> , <u>scene</u> , <u>hustle</u>
oi.	<u>oyster</u> , <u>soil</u>
ər.	<u>measure</u> , <u>assure</u> , <u>sugar</u> , <u>dirty</u> , <u>cellar</u>
ou.	<u>ouch</u> , <u>owl</u>
v.	<u>vat</u> , <u>haven</u>
w.	<u>win</u> , <u>one</u>
z.	<u>zip</u> , <u>fuzz</u> , <u>rose</u>

Notes:

ə (by itself) is the schwa sound. It stands for the vowel sound in unaccented syllables.

ər can occur in accented or unaccented syllables

ŭ is the short u sound. It can only occur in an accented syllable (if unaccented, it's ə).

The ö and ō symbols on the actual phonetics cubes look slightly different, as the symbols here are constrained by the available fonts.

Michigan League of Academic Games Official On-Words Two-Letter Word List

AA /ää/- rough, cindery lava	HA /hä/- sound of surprise	OP /äp/- a style of abstract art
AB /äb/- abdominal muscle	HE /hē/- male person	OR /ôr/, /ôər/, /ər/- the heraldic color gold; conjunction between alternatives
AD /äd/- advertisement	HI /hī/- a greeting	OS /äs/- a bone
AE /ā/- one	HM /hm/- expresses consideration	OW /ou/- expresses pain
AG /äg/- pertaining to agriculture	HO /hō/- expresses surprise	OX /äks/- a clumsy person
AH /ä/- expresses delight	ID /id/- part of the psyche	OY /oi/- expresses dismay
AI /ī/- three-toed sloth	IF /if/- a possibility	PA /pä/- father
AL /äl/- an East Indian tree	IN /in/- to harvest	PE /pā/- a Hebrew letter
AM /äm/- form of “to be”	IS /iz/- form of “to be”	PI /pī/- a Greek letter
AN /ən/, /än/- indefinite article	IT /it/- neuter pronoun	QI /chē/- circulating life energy
AR /är/- the letter “R”	JO /jō/- sweetheart	RE /rā/- a tone of the scale
AS /äz/- to the same degree	KA /kä/- spiritual self	SH /sh/- urges silence
AT /ät/- in the position of	KI /kē/- inner strength, life energy	SI /sē/- a tone of the scale
AW /ô/- expresses protest	LA /lä/- a tone of the scale	SO /sō/- a tone of the scale
AX /äks/- cutting tool	LI /lē/- Chinese unit of distance	TA /tä/- expression of gratitude
AY /ī/- affirmative voice	LO /lō/- expresses surprise	TI /tē/- a tone of the scale
BA /bä/- eternal soul	MA /mä/- mother	TO /tōō/- in the direction of
BE /bē/- to have actuality	ME /mē/- personal pronoun	UH /ü/, /ə/- expresses hesitation
BI /bī/- two	MI /mē/- a tone of the scale	UM /üm/, /mmm.../- indicates hesitation
BO /bō/- a pal	MM /m/- expresses assent	UN /ün/- one
BY /bī/- a side issue	MO /mō/- a moment	UP /üp/- to raise
DE /dē/, /də/- of; from	MU /mū/- a Greek letter	US /üs/- personal pronoun
DO /dō/, /dōō/- a tone of the scale; carry out	MY /mī/- possessive pronoun	UT /üt/- a tone of the scale
ED /ēd/- education	NA /nə/ or /nü/- no; not	WE /wē/- pronoun
EF /ēf/- the letter “F”	NE /nā/- born with the name of	WO /wō/- woe
EH /ā/, /ē/- expresses doubt	NO /nō/- a negative reply	XI /zī/- a Greek letter
EL /ēl/- elevated railroad	NU /nū /- a Greek letter	XU /sōō/- Vietnamese money
EM /ēm/- the letter “M”	OD /äd/- a hypothetical force	YA /yü/, /yə/- you
EN /ēn/- the letter “N”	OE /ō/- Faeroe Isl. whirlwind	YE /yē/- you
ER /ə/, /ü/- expresses hesitation	OF /əv/, /üv/- from	YO /yō/- used to call attention
ES /ēs/- the letter “S”	OH /ō/- to exclaim in surprise	ZA /zä/- a pizza
ET /ēt/- a past tense of eat	OI /oi/- expresses dismay	
EX /ëks/- the letter “X”	OM /ōm/, /ôm/- a mantra	
FA /fä/- a tone of the scale	ON /ôn/, /än/- batsman’s side of a wicket	
FE /fā/- a Hebrew letter		
GO /gō/- to move along		