

Talented students in senior and junior secondary school who enjoy solving puzzles and who have a knack for logic and languages are invited to test their minds against fiendish and fun linguistic problems in the **twenty-sixth Australian Computational and Linguistics Olympiad (OzCLO)** to be held in **March 2023**. Students who have a keen interest in English, languages, maths or computing are a good match for the competition.

OzCLO is an exciting team-based national competition which challenges students to solve puzzles in fascinating real languages. Students work together in teams of four on a range of analytical problems. The top three teams for each region will go through to the National Round. The winners of the National Round are offered the opportunity to represent Australia at the International Linguistics Olympiad (IOL), which will be held in July 2023 in Hungary.

There is a **training package** and **past problems including solutions** available for

schools, and lots of information on the OzCLO website: www.ozclo.org.au.

The **Australian Computational and Linguistics Olympiad (OzCLO)** has been held at universities around Australia since 2008, with over 2000 secondary students competing since then. The competition is coordinated by a team of linguists at several Universities in Australia.

Regional and National Rounds:

Regional: 1 March 2023

National: 22 March 2023

Registration, information and contact:

www.ozclo.org.au

opens 16 January, closes 24 February

Registration fee: 40\$ per team

Students in years 11 and 12 will be eligible to enter the Senior competition, and students in years 7 to 10 will participate in the Junior competition. All registrations will be managed through their teacher

contact, students will not be contacted individually.

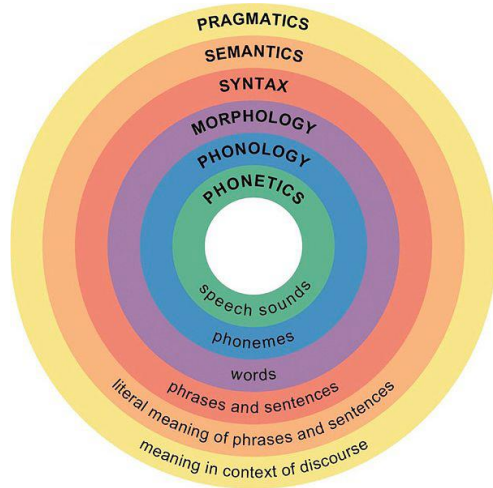
Do your students enjoy solving problems and cracking codes?

Get involved in OzCLO 2023!



Australian Computational and Linguistics Olympiad

www.ozclo.org.au



Try out this sample puzzle!

Kannada is one of the major languages of India, spoken by more than 25 million people primarily in the south of the country, near Bangalore. It is a very old language and it uses its own writing system. In this puzzle, the Kannada letters are transcribed using the Roman alphabet. The letters L, D, T, and N represent a special pronunciation of those sounds with the tongue curled upward.

Hint: There is no translation for “the” in Kannada.

(a) Which parts of the words in the second column correspond to the English word 'to'?

(b) Now, here are some new words in Kannada:

- hamsa 'swan'
- akka 'older sister'
- tangi 'younger sister'

How would you say:

'to (the) swan' _____

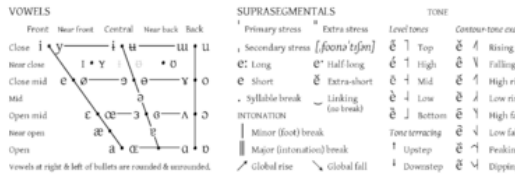
'to (the) older sister' _____

'to (the) younger sister' _____

THE INTERNATIONAL PHONETIC ALPHABET (2005)

	LABIAL		CORONAL		DORSAL		LABIODORSAL		GLOTTAL	
	Bilabial	Labio-dental	Dental	Alveolar	Palato-alveolar	Retroflex	Palatal	Velar	Uvular	Glottal
Nasal	m	ɱ	n	ɳ	ɲ	ɳ	ɲ	ŋ	ɴ	ʔ
Plosive	p	ɸ β	t	ʈ	ʈ	ɟ	k	q	g	ʔ
Fricative	ɸ β	f	v	θ	ð	s	ʂ	ʃ	ʃ	h
Approximant		ʋ	ɹ	ɻ	ɻ	ɻ	ɻ	ɻ	ɻ	ʕ
Trill	ʙ		r							ʀ
Tap, Flap		ɸ	ɾ							ɽ
Lateral fricative			ɬ	ɮ						
Lateral approximant			l	ɭ	ʎ		ʎ			
Lateral tap			ɺ							

CONSONANTS (NON-PULMONIC)			CONSONANTS (CO-ARTICULATED)		
Anterior click releases (requires posterior stops)			Voiced implosives		Ejectives
◌ ɠ	Bilabial fricated	ɸ β	ɓ	Bilabial	ʼ
◌ ɲ̠	Laminal alveolar fricated ("dental")	ɸ β	ɗ	Dental or alveolar	ʼ
◌ ɲ̡	Apical postalveolar fricated ("retroflex")	ɸ β	ɟ	Dental or alveolar	ʼ
◌ ɲ̣	Laminal postalveolar fricated ("palatal")	ɸ β	ɟ	Velar	ʼ
◌ ɲ̤	Lateral alveolar fricated ("lateral")	ɸ β	ɟ	Uvular	ʼ
			ɟ	Alveolar fricative	ʼ



DIACRITICS		PHONETIC DETAIL		PRIMARY ARTICULATION		SECONDARY ARTICULATION	
◌̥	Labial	◌̦	Labial	◌̪	Dental	◌̫	Labialized
◌̧	Labial	◌̨	Labial	◌̩	Alveolar	◌̪̯	Labialized
◌̨	Labial	◌̩	Labial	◌̪̯	Alveolar	◌̪̯̯	Labialized
◌̩	Labial	◌̪̯	Labial	◌̪̯̯	Alveolar	◌̪̯̯̯	Labialized
◌̪̯	Labial	◌̪̯̯	Labial	◌̪̯̯̯	Alveolar	◌̪̯̯̯̯	Labialized
◌̪̯̯	Labial	◌̪̯̯̯	Labial	◌̪̯̯̯̯	Alveolar	◌̪̯̯̯̯̯	Labialized
◌̪̯̯̯	Labial	◌̪̯̯̯̯	Labial	◌̪̯̯̯̯̯	Alveolar	◌̪̯̯̯̯̯̯	Labialized
◌̪̯̯̯̯	Labial	◌̪̯̯̯̯̯	Labial	◌̪̯̯̯̯̯̯	Alveolar	◌̪̯̯̯̯̯̯̯	Labialized
◌̪̯̯̯̯̯	Labial	◌̪̯̯̯̯̯̯	Labial	◌̪̯̯̯̯̯̯̯	Alveolar	◌̪̯̯̯̯̯̯̯̯	Labialized
◌̪̯̯̯̯̯̯	Labial	◌̪̯̯̯̯̯̯̯	Labial	◌̪̯̯̯̯̯̯̯̯	Alveolar	◌̪̯̯̯̯̯̯̯̯̯	Labialized

- mane 'house' manege 'to (the) house'
- peeTe 'market' peeTege 'to (the) market'
- tande 'dad' tandege 'to dad'
- roTTi 'flat bread' roTTige 'to (the) flat bread'
- chaTNI 'chutney' chaTNige 'to (the) chutney'
- hakki 'bird' hakkige 'to (the) bird'
- taayi 'mother' taayige 'to mother'
- jooLa 'corn' jooLakke 'to (the) corn'
- pustaka 'book' pustakakke 'to (the) book'
- simha 'lion' simhakke 'to (the) lion'
- kalkatta 'Calcutta' kalkattakke 'to Calcutta'
- manushya 'man' manushyanige 'to (the) man'
- amma 'mum' ammanige 'to mum'
- huDuga 'boy' huDuganige 'to (the) boy'
- sneehita 'friend' sneehitanige 'to (the) friend'

Problem by Mirjam Fried. Copyright 1999-2007. Department of Linguistics, University of Oregon



Australian Computational and Linguistics Olympiad

If you enjoyed this puzzle, talk to a teacher about getting involved in

OzCLO or check out: www.ozclo.org.au