

# Morphology

## Aim:

Morphology is the study of the way words are built up from smaller meaning bearing units i.e., morphemes. A morpheme is the smallest meaningful linguistic unit. For eg:

बच्चों(bachchoM) consists of two morphemes, बच्चा(bachchaa) has the information of the root word noun "बच्चा"(bachchaa) and ओं(oM) has the information of plural and oblique case.

played has two morphemes play and -ed having information verb "play" and "past tense", so given word is past tense form of verb "play".

बच्चा	-ओं
लड़का	-ओं
play	-ed
want	-ed

Words can be analysed morphologically if we know all variants of a given root word. We can use an 'Add-Delete' table for this analysis.



## Objective:

The Objective of the experiment is understanding the morphology of a word by the use of Add-Delete table.

## Procedure:

**STEP 1:** Select a word root.

**STEP 2:** Fill the add-delete table and submit.

**STEP 3:** If wrong, see the correct answer or repeat STEP1.

## Output

### Morphology

Select a Root Word

लड़का

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ	आ	sing	dr	✓
आ	ए	plu	dr	✓
आ	ए	sing	ob	✓
आ	औ	plu	ob	✓

Submit

Correct Answer!

For Example for लड़का:

Delete	Add	Number	Case
आ	आ	sing	dr
आ	ए	plu	dr
आ	ए	sing	ob
आ	औ	plu	ob

## Theory:

### Morph Analyser

#### Definition

Morphemes are considered as smallest meaningful units of language. These morphemes can either be a root word(play) or affix(-ed). Combination of these morphemes is called morphological process. So, word "played" is made out of 2 morphemes "play" and "-ed". Thus finding all parts of a word(morphemes) and thus describing properties of a word is called "Morphological Analysis". For example, "played" has information verb "play" and "past tense", so given word is past tense form of verb "play".

## Analysis of a word :

बच्चों (bachchoM) = बच्चा(bachchaa)(root) + ओं(oM)(suffix) (ओं=3 plural oblique) A linguistic paradigm is the complete set of variants of a given lexeme. These variants can be classified according to shared inflectional categories (eg: number, case etc) and arranged into tables.

### Paradigm for बच्चा

Case/num	Singular	Plural
Direct	बच्चा(bachchaa)	बच्चे(bachche)
oblique	बच्चे(bachche)	बच्चों (bachchoM)

### Algorithm to get बच्चों(bachchoM) from बच्चा(bachchaa)

1. Take Root बच्च(bachch)आ(aa)
2. Delete आ(aa)
3. output बच्च(bachch)
4. Add ओं(oM) to output
5. Return बच्चों (bachchoM)

Therefore आ is deleted and ओं is added to get बच्चों

### Add-Delete table for बच्चा

Delete	Add	Number	Case	Variants
आ(aa)	आ(aa)	sing	dr	बच्चा(bachchaa)
आ(aa)	ए(e)	Plu	dr	बच्चे(bachche)
आ(aa)	ए(e)	Sing	ob	बच्चे(bachche)
आ(aa)	ओं(oM)	Plu	ob	बच्चों(bachchoM)

### Paradigm Class

Words in the same paradigm class behave similarly, for Example लड़क is in the same paradigm class as बच्च, so लड़का would behave similarly as बच्चा as they share the same paradigm class.

### Assignment

**Q1.** Select words from this which belong to the same paradigm: मनुष्य(manuShya), पक्षी(pakshii), शिशु(shishu), गुरु(guruu), नर(nar)

**Q2.** Construct the paradigm table for the above words.