



# ENGLISH LANGUAGE SEMESTER 2: 2023-2024 CHAPTER 7

INSTRUCTOR

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Text book: Headway Academic Skills: Reading, Writing, and  
Study Skills, Level 3. By: Sarah Philpot and Lesley Curnick

The image features a solid green background. In the center, there is a large, faint white circle. Scattered around the edges of the frame are several realistic water droplets of various sizes, each with a white highlight and a soft shadow, giving them a three-dimensional appearance. The word "READING" is centered in the lower half of the image in a bold, black, sans-serif font.

**READING**

# How to make reading easier

As you read a text, decide which words:

- ✓ you need to know to understand the text
- ✓ you can guess the meaning of

To help you guess the meaning of an unknown word:

- Identify the part of speech.
- Use what you already know about the subject.
- Look at the words and sentences around the unknown word.
- Think of a similar word and try it in the sentence. Does it make sense?

# How to make reading easier

Complex sentences have more than one clause. To help you understand them, identify the main clause:

To report the results that are grid and time step independent, **an extensive grid independence and time independence study was done.**

Identify the other clauses by looking for relative pronouns, linking words, and phrases beginning with a present or past participle.

**To report the results that are grid and time step independent, an extensive grid independence and time independence study was done.**

# How to make reading easier

Pronouns, e.g., it and this, are used to avoid repetition in a text. Identifying these referents helps you understand a text.

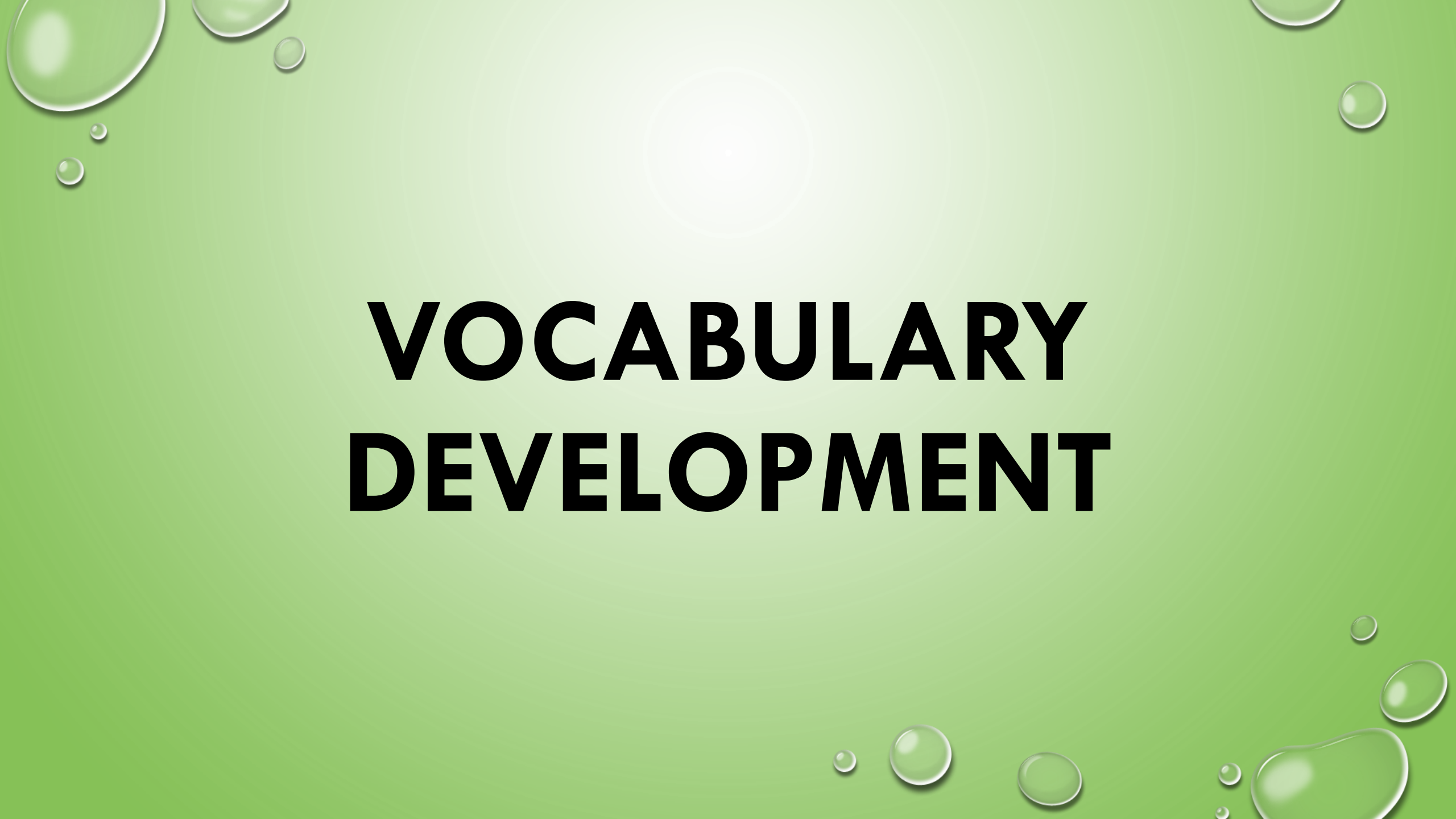
- **Backward** referencing refers to something which has been mentioned previously, perhaps in another sentence. For example:

The mixing rate increases. **This** happens due to the secondary vortices near the high velocity zone

This approach is considered to be very efficient. **It** is capable of absorbing, storing, and releasing heat on demand.

- **Forward** referencing refers to something which comes later in the sentence. For example:

**It** is worth noting that the effect of hot surface temperature in the heat transfer enhancement becomes more significant at low hot temperature.

The background is a solid light green color. It features several realistic water droplets of various sizes, some with highlights and shadows, scattered across the frame. In the center, there is a faint, large, light-colored circular graphic that resembles a stylized sun or a lens flare, with a central bright spot and a soft, glowing outer ring.

# **VOCABULARY DEVELOPMENT**

# PARTS OF SPEECH

verb	noun	adjective	adverb
analyze	analysis, analyst	analytical	analytically
	consistency	(in)consistent	consistently
decide	decisiveness, decision	(in)decisive	decisively
economize	economy, economist	economic, economical	economically
invent	invention	inventive	inventively
involve	involvement	Involved, involving	involvedly
produce	production, producer, product	productive	
signify	signification	(in)significant	significantly
theorize	theory, theorem	theoretic, theoretical	theoretically

nouns    -tion, -ance, -ness, -ment  
people    -ist, -yst, -or, -er

-ant, -ive, -able, -ic, -al, -ent

-ly, -ily

# PARTS OF SPEECH (ASSIGNMENT)

verb	noun	adjective	adverb
			completely
differ			
	observation		
prove			
	science		
succeeded			



The image features a solid green background. In the center, there is a large, faint white circle. Scattered around the edges are several realistic water droplets of various sizes, some with highlights and shadows, giving them a three-dimensional appearance. The word "RESEARCH" is centered in the lower half of the image in a bold, black, sans-serif font.

**RESEARCH**

## AVOIDING PLAGIARISM

Writing a material often involves using information from books, articles, or websites. **It is important to acknowledge these sources in a list of references (or bibliography) at the end of your essay.** There are various styles and conventions. Check your department's (**the journal's**) preferred style and use it consistently. Do not mix styles.

The image features a vibrant green background with a subtle radial gradient. In the center, there is a large, faint white circle. Scattered around the edges are several realistic water droplets of various sizes, each with a white highlight and a soft shadow, giving them a three-dimensional appearance. The word "WRITING" is prominently displayed in the middle of the frame.

**WRITING**

# SUMMARIZING

You may be required to write a summary of a text.

- First, identify the main ideas in the paragraph or text.
- Then organize these ideas into a logical order.
- Finally, rewrite these ideas in simple sentences, using linking words.

Remember to use your own words.

Polymeric composite materials have emerged as one of the best composites used in modern and advanced applications due to the important and useful properties such as lightweight, excellent thermal and electrical insulation as well as relatively good resistance. In this paper, a composite material has been manufactured with polymer matrix which is reinforced with ceramic particles and the mechanical properties have been studied. Epoxy resin Quick mast 105 has been mixed with a hardener by a ratio 3:1, then reinforced with different volume fractions of Yttrium oxides  $Y_2O_3$  (0, 1.5, 3, 4.5, 6%). The composites samples are manufactured with hand lay-up molding, then the mechanical properties such as hardness, compressive strength, flexural strength and the wear rates with different loads (5, 10, 15, 20) Newton are investigated. The results showed that both hardness and compressive strength were increased by increasing the content of the reinforcement as it increased by 62% and 12% respectively, in contrast to flexural strength which decreased by increasing the  $Y_2O_3$  content by 45%, the wear results showed a decrease in the wear rate by increasing the  $Y_2O_3$  content up to 3% and then the wear rate is proportional with the reinforcement content and 0% recorded the highest wear rate, on the other hand by increasing the load of the wear rate test, it was found that the wear rate increased at all the ratios of reinforcement.

A composite material was manufactured with reinforced polymer matrix, with ceramic particles.

Hardness, compressive strength, flexural strength and the wear rates with different loads (5, 10, 15, 20) Newton were measured.

The results → hardness and compressive strength ↑ as reinforcement content ↑



*Thank You  
For Your  
Attention*