

SNS COLLEGE OF PHARMACY AND HEALTH SCIENCES

Affiliated To The Tamil Nadu Dr. MGR Medical University, Chennai

Approved by Pharmacy Council of India, New Delhi.

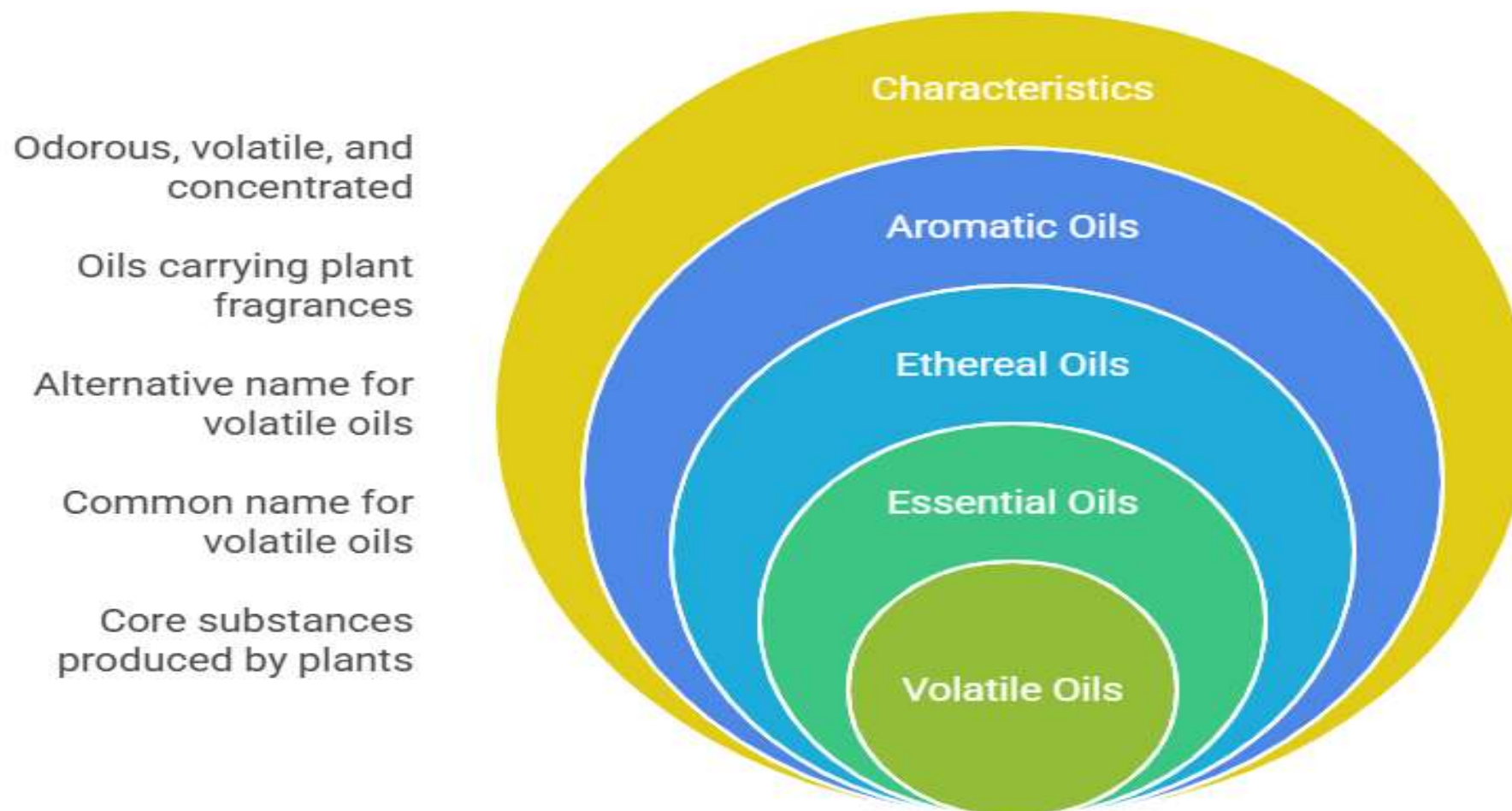
Coimbatore -641035

COURSE NAME : PHARMACOGNOSY AND PHYTOCHEMISTRY II (BP504T)

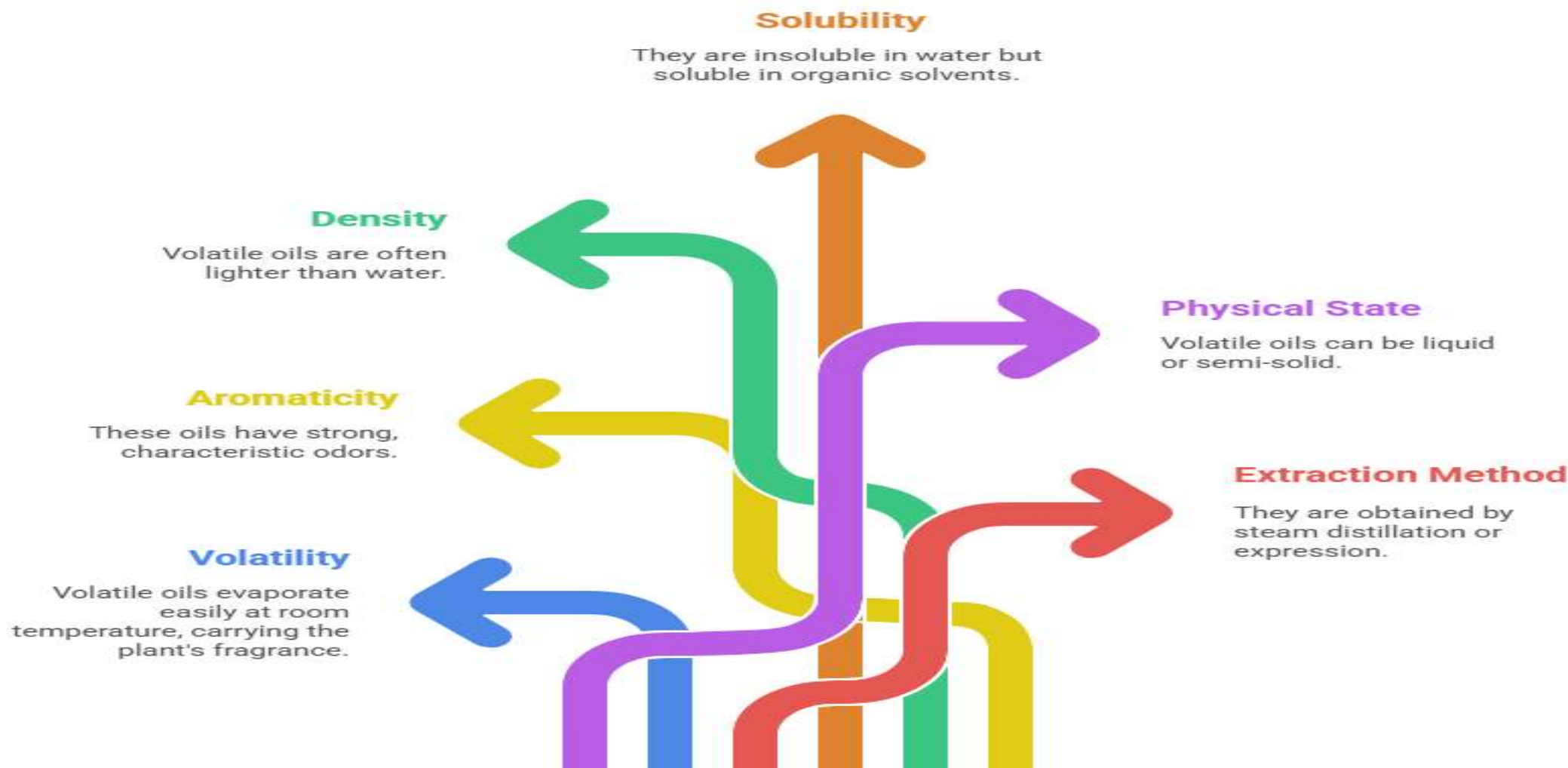
V SEM / IIIYEAR

TOPIC 1 : VOLATILE OILS

Volatile Oils



What are the key characteristics of volatile oils?



What are the key characteristics of essential oils?

Obtained by Distillation/Expression

Produced through
specific extraction
methods.

Insoluble in Water

Do not mix with
water, requiring
organic solvents for
dissolution.

Aromatic

Possess strong
odours, used in
perfumes and
aromatherapy.

Liquid/Semi- solid

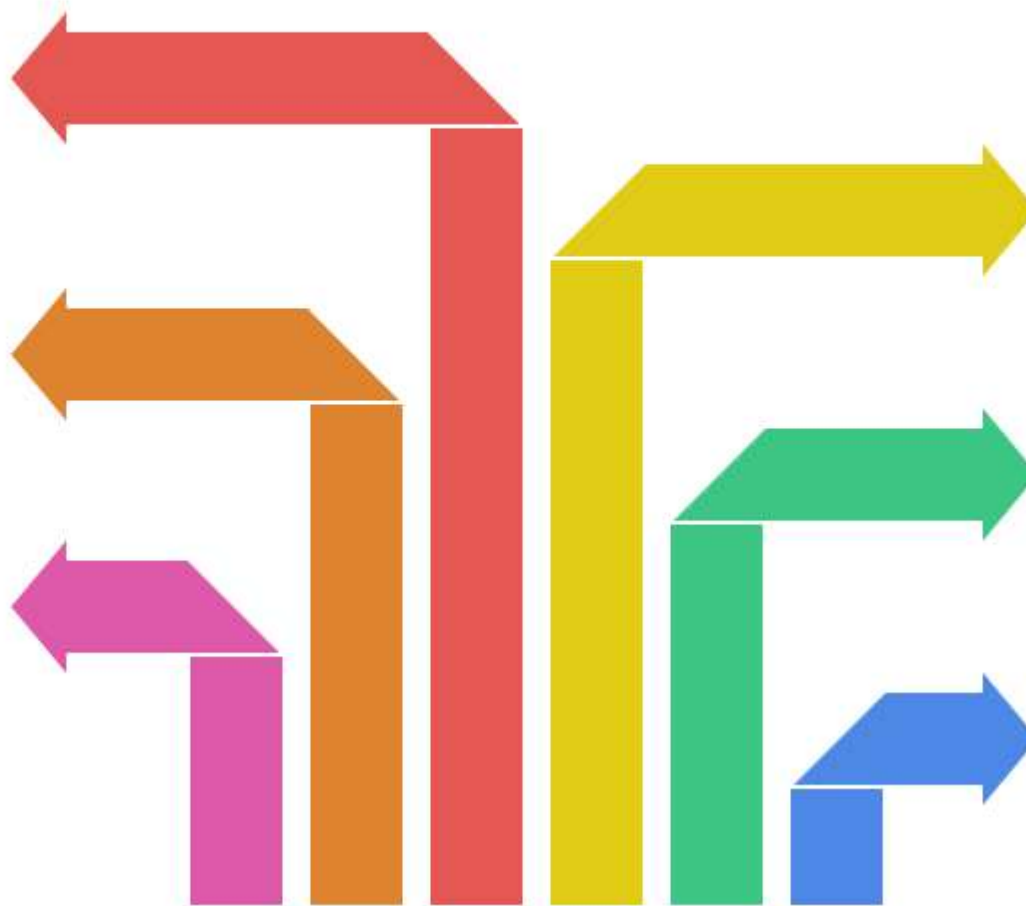
Exist in liquid or
semi-solid states,
affecting storage
and application.

Lighter than Water

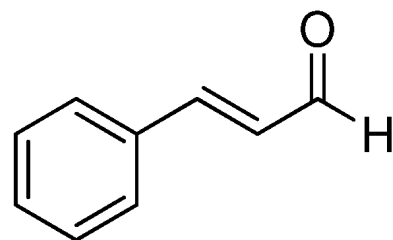
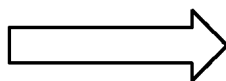
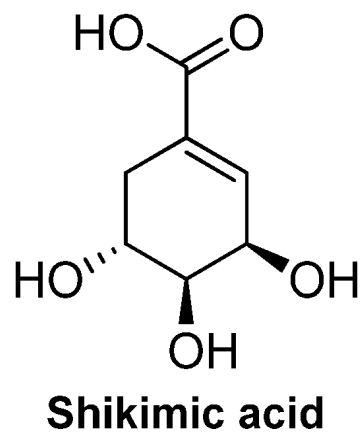
Float on water,
useful for separation
techniques.

Volatile

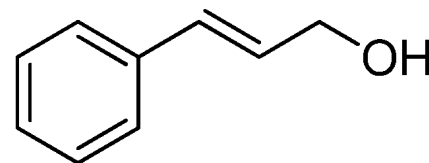
Evaporate easily,
contributing to their
aroma.



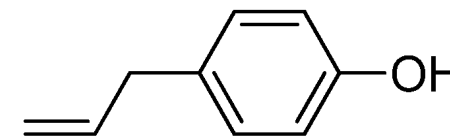
- Phenylpropanoids



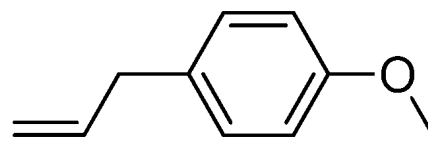
Cinnamaldehyde



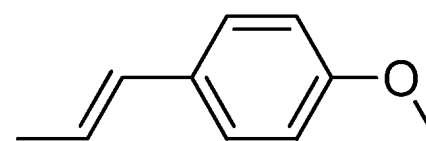
Cinnamyl alcohol



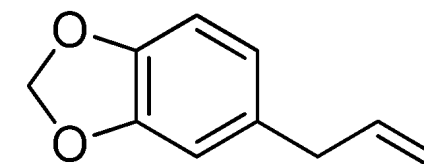
Chavicol



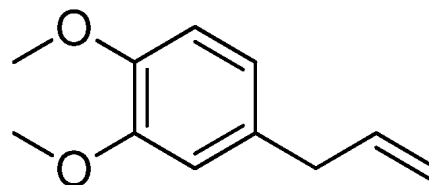
Estragole



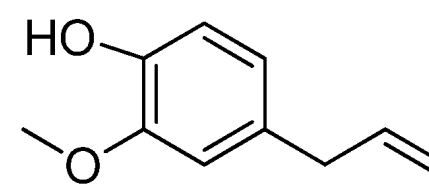
Anethole



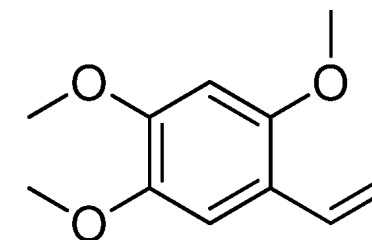
Safrole



Methyl eugenol

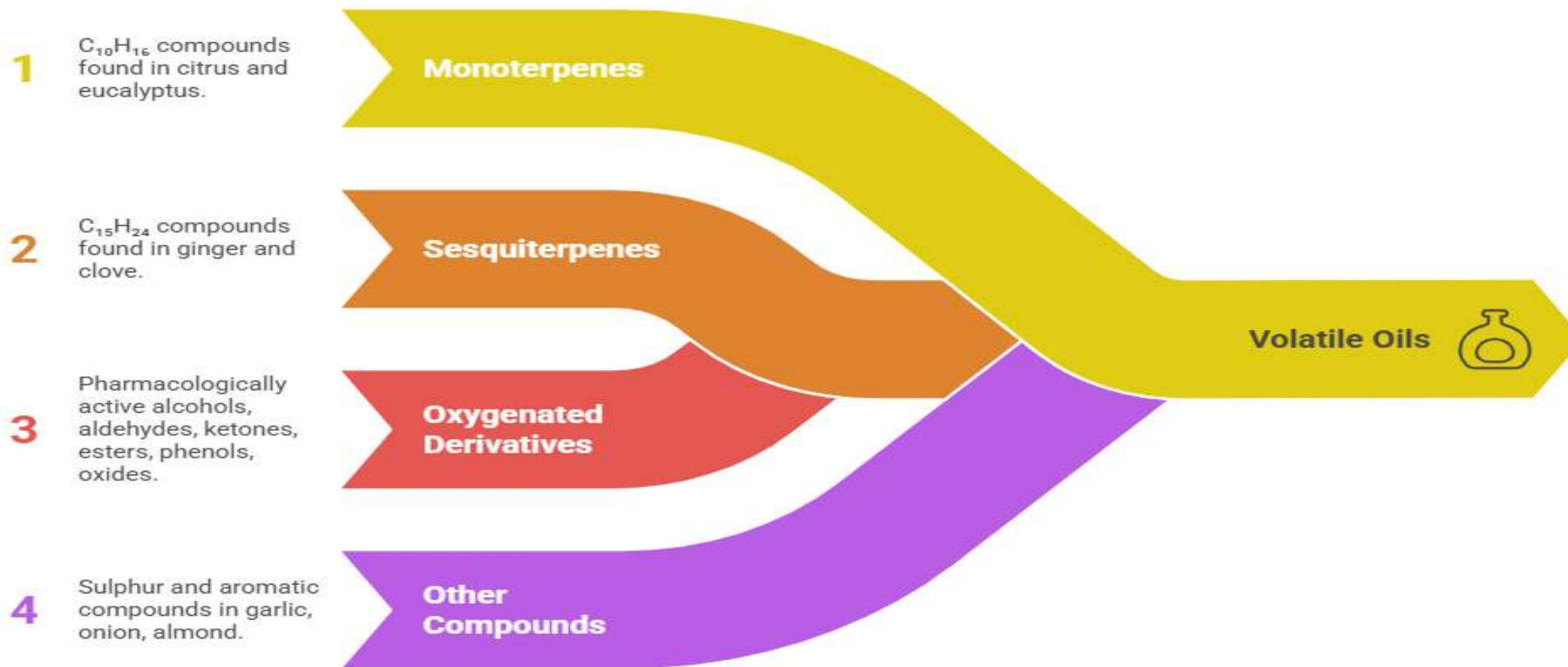


Eugenol

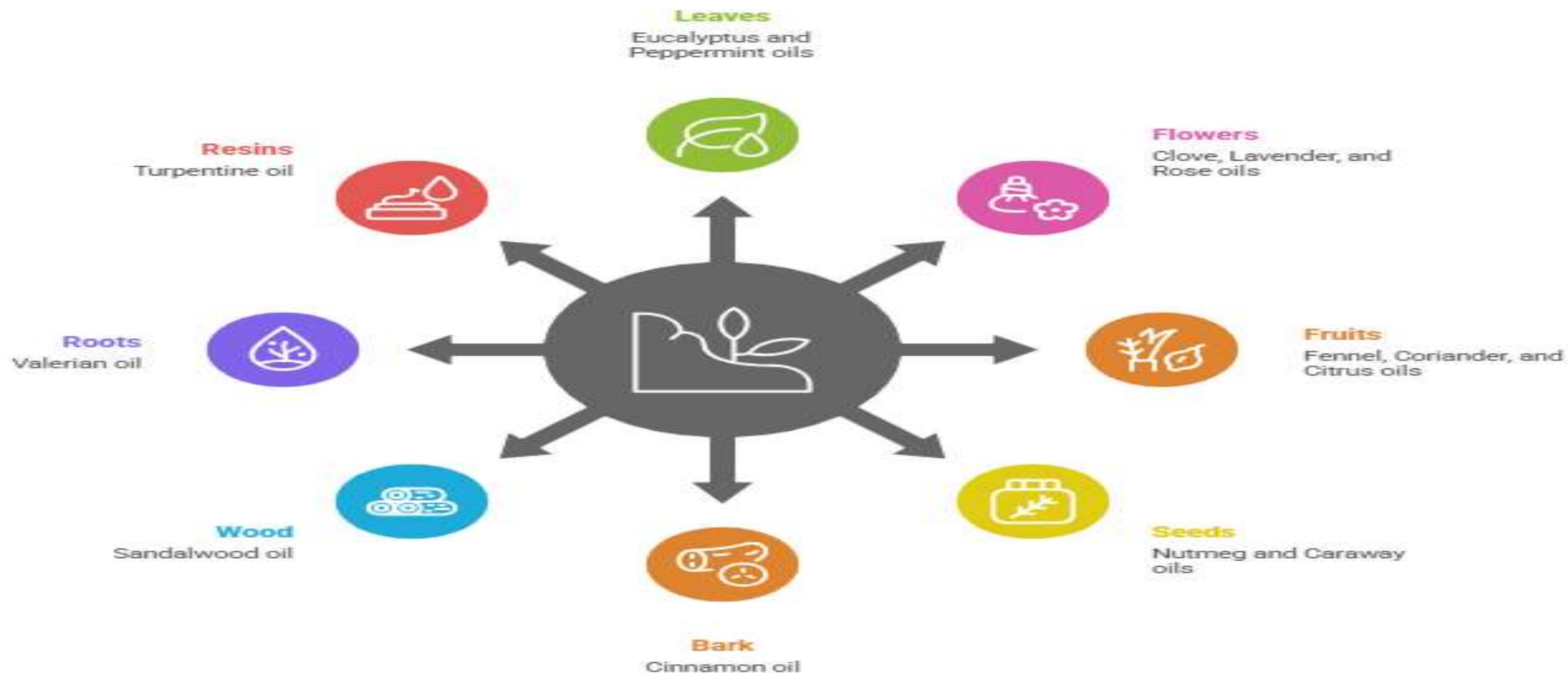


β -Asarone

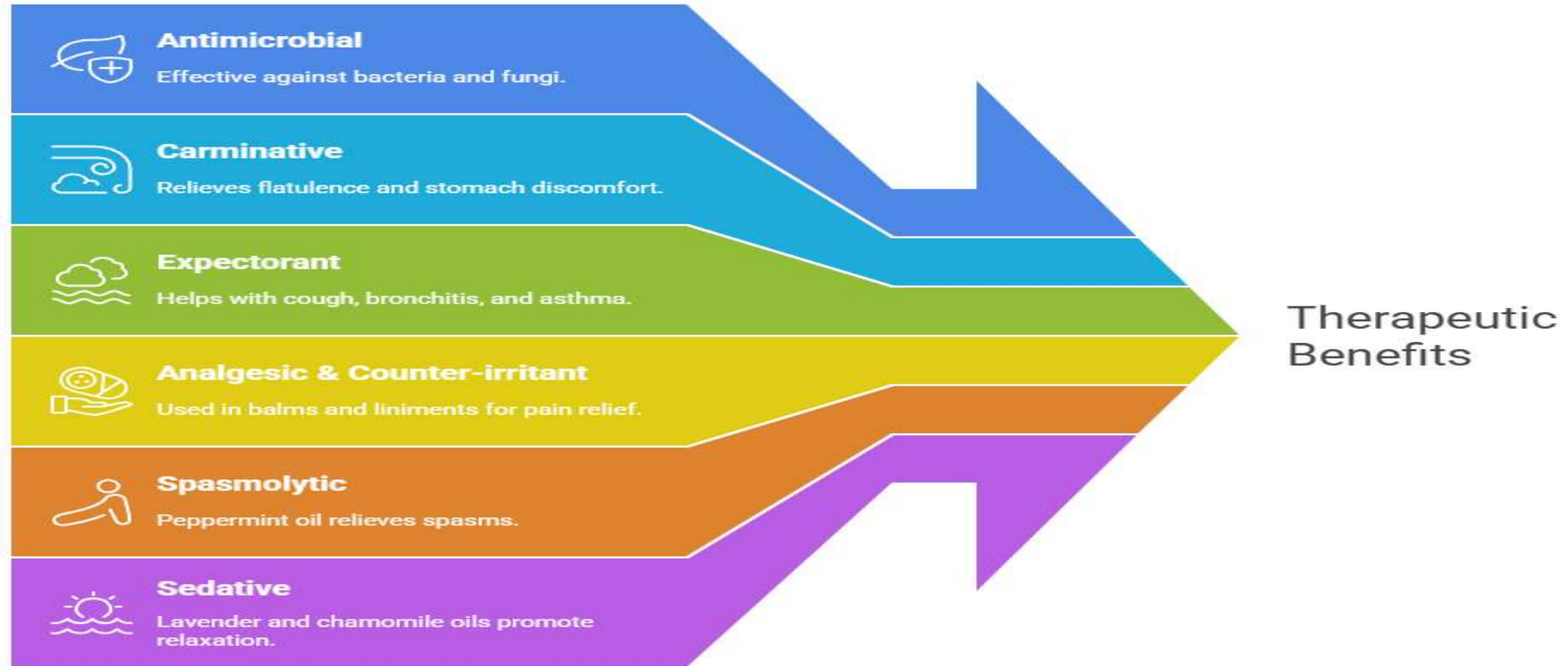
Aromatic Symphony of Volatile Oils



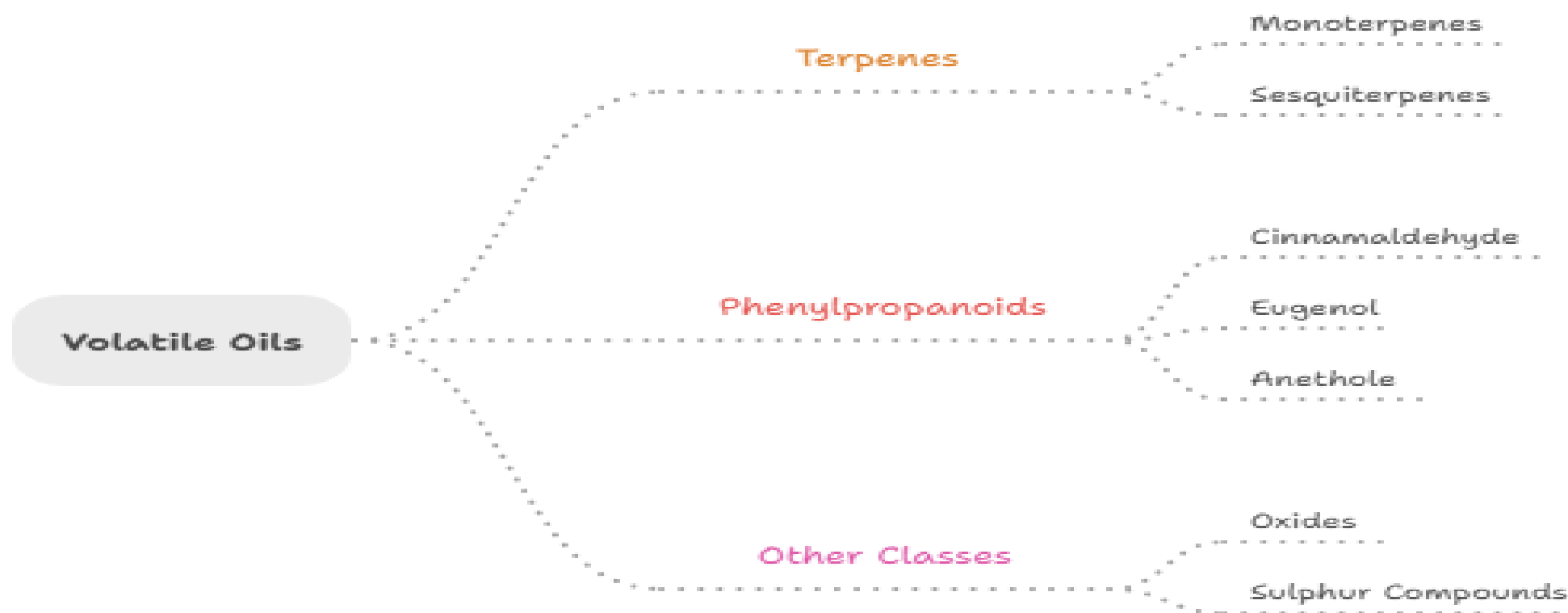
Sources of Volatile Oils



Volatile Oils in Health



Chemical Classes of Volatile Oils



Diverse Applications of Volatile Oils

Pharmaceutical Industry



Used in balms, ointments, and cough syrups

Perfumery & Cosmetics



Essential in soaps, creams, and incense sticks

Agricultural Use



Acts as natural pesticides



Food Industry

Provides flavouring in bakery and beverages



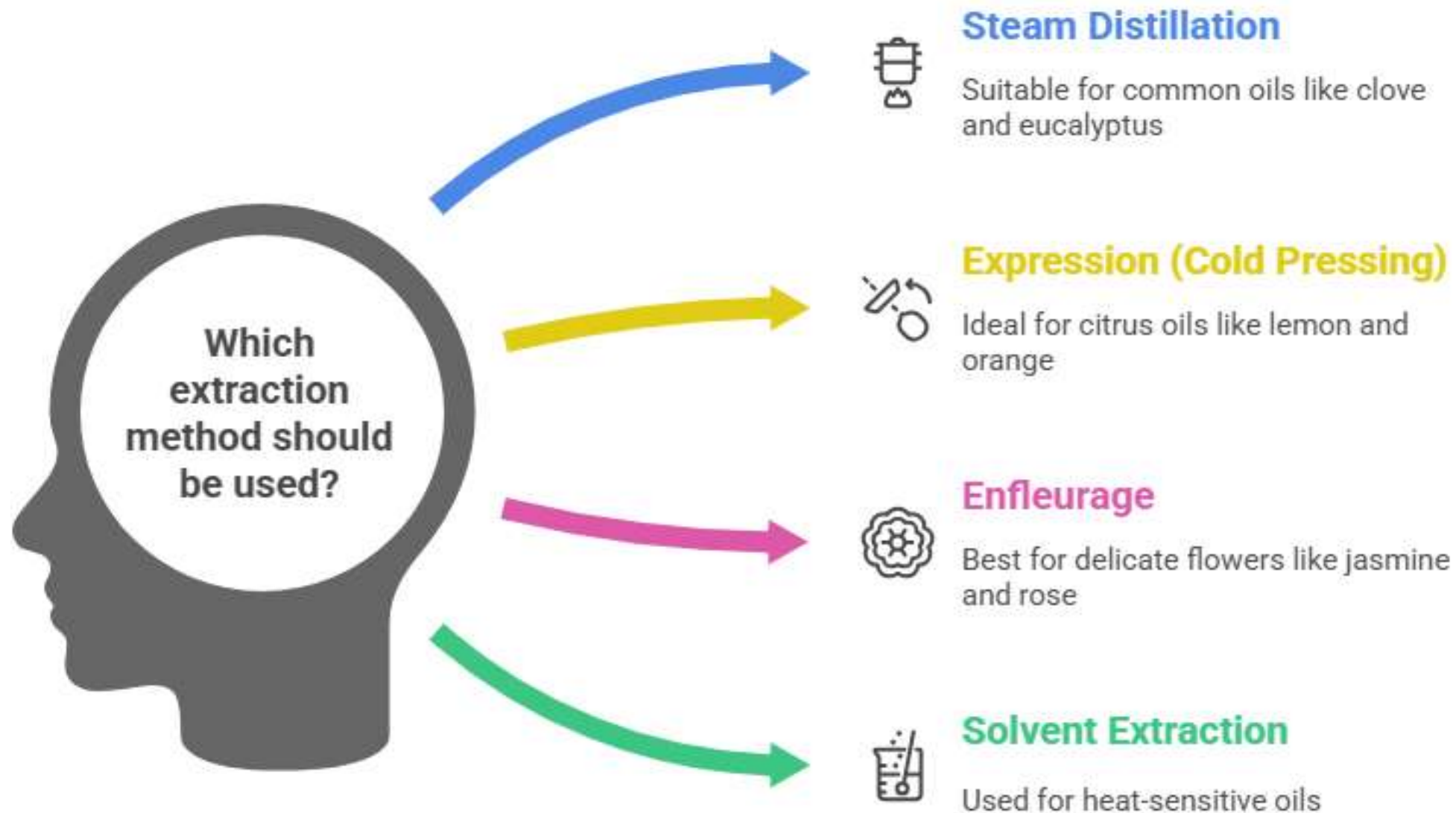
Aromatherapy

Offers stress relief and mood enhancement



Dental Preparations

Clove oil used for toothache relief



Identification and Storage



Solubility Test

Soluble in 90% alcohol, insoluble in water.



Odour Test

Characteristic smell for identification.



TLC / GC-MS

Identifies volatile oil composition.



Sudan III Test

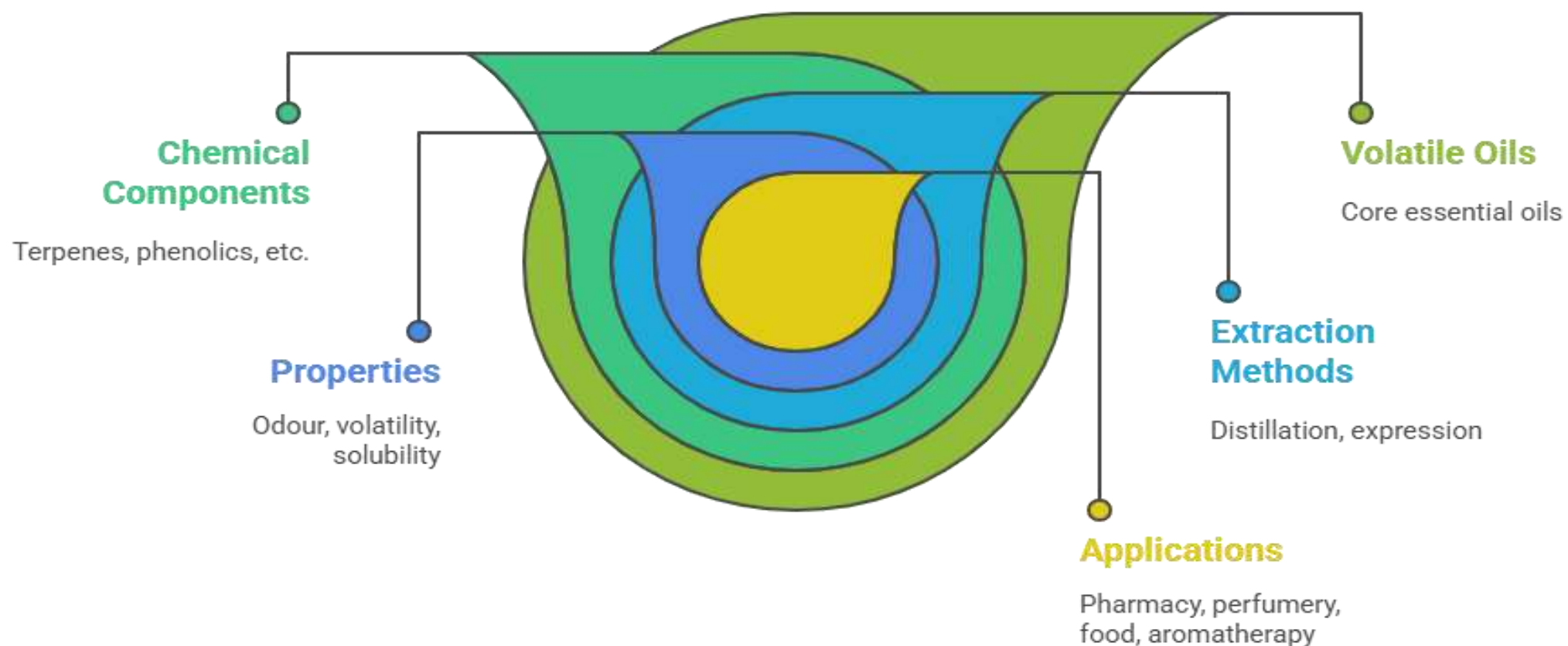
No permanent stain, differentiates from fixed oil.



Storage

Store in amber bottles, protect from light, heat, and air.

Volatile Oils Composition and Uses



What is the answer to the volatile oils assessment question?

