

PLANTS: STRUCTURE AND FUNCTION

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**National Science
Foundation**

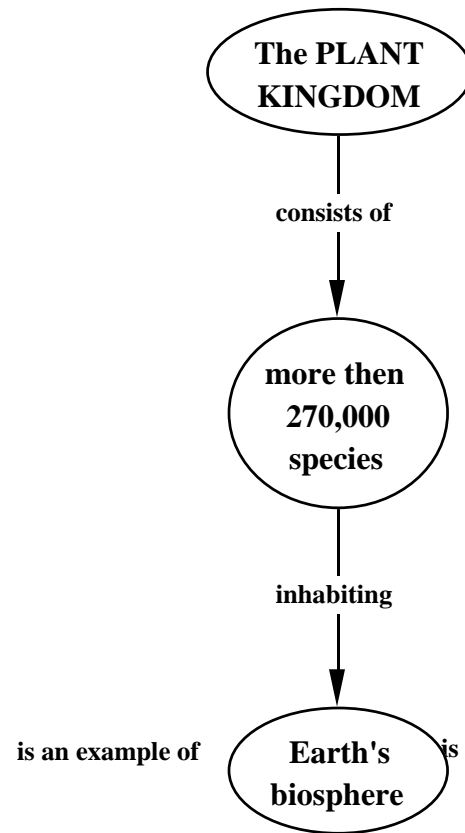
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Plants: Structure and Function

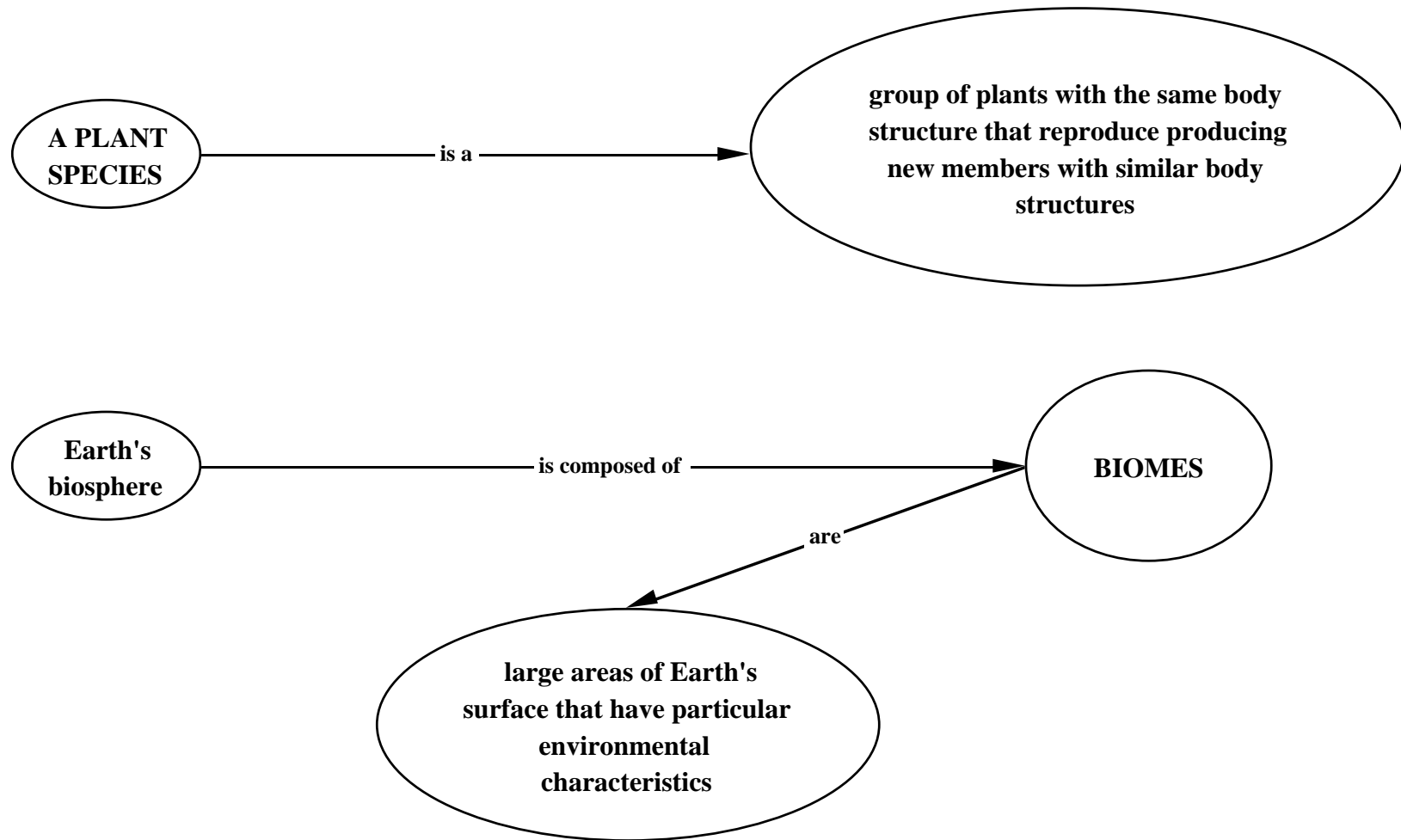
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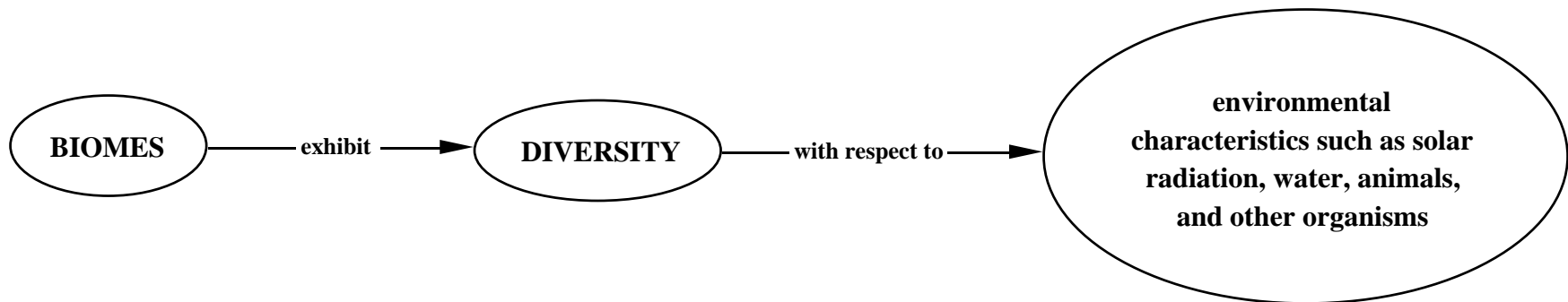
PLANT KINGDOM



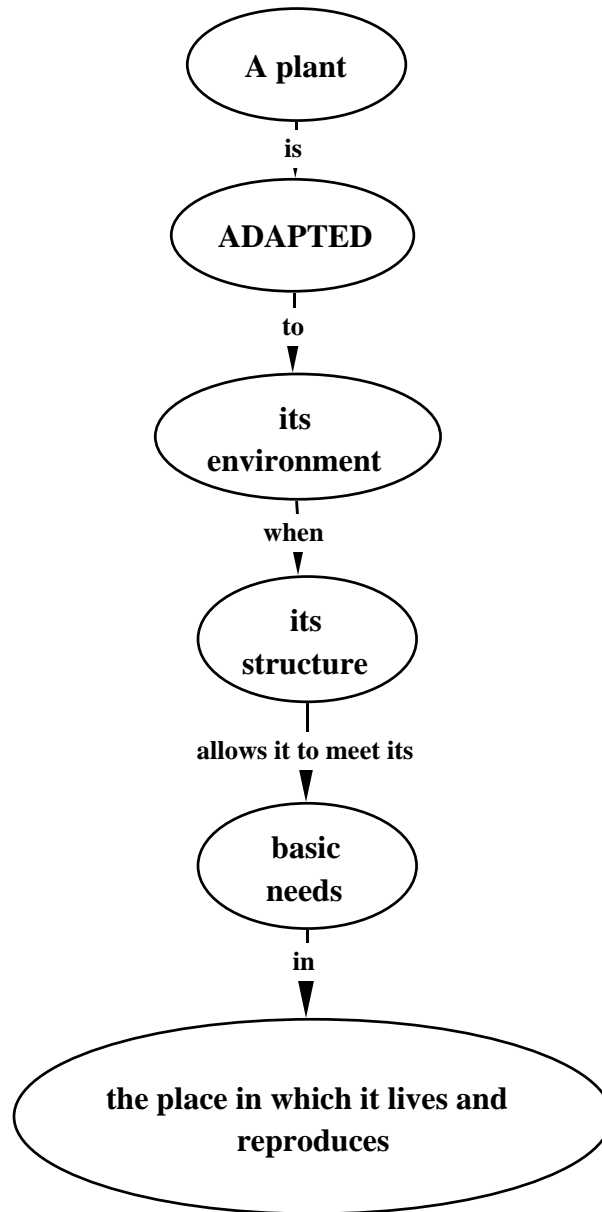
PLANT SPECIES AND BIOMES



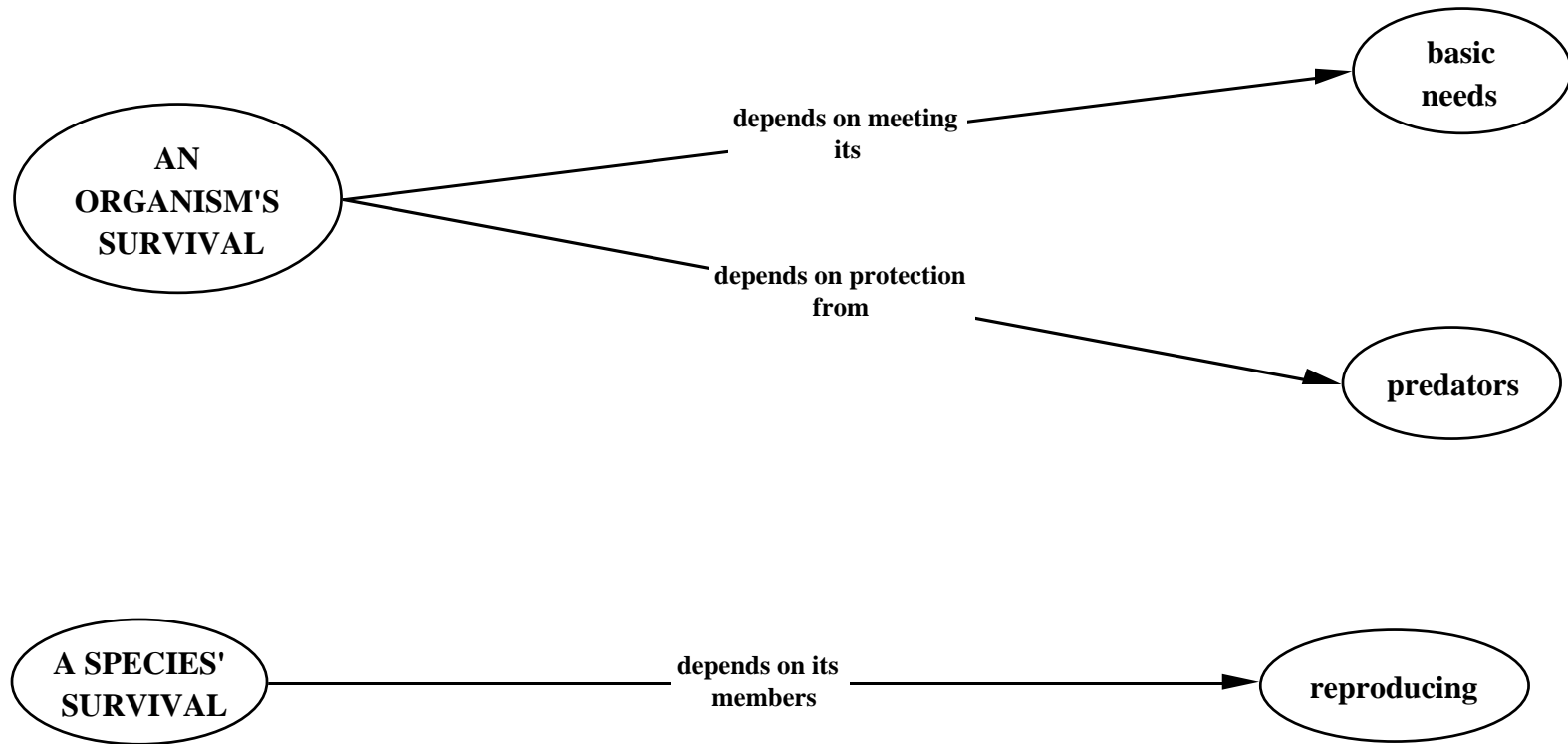
DIVERSITY: PLANT SPECIES AND BIOMES

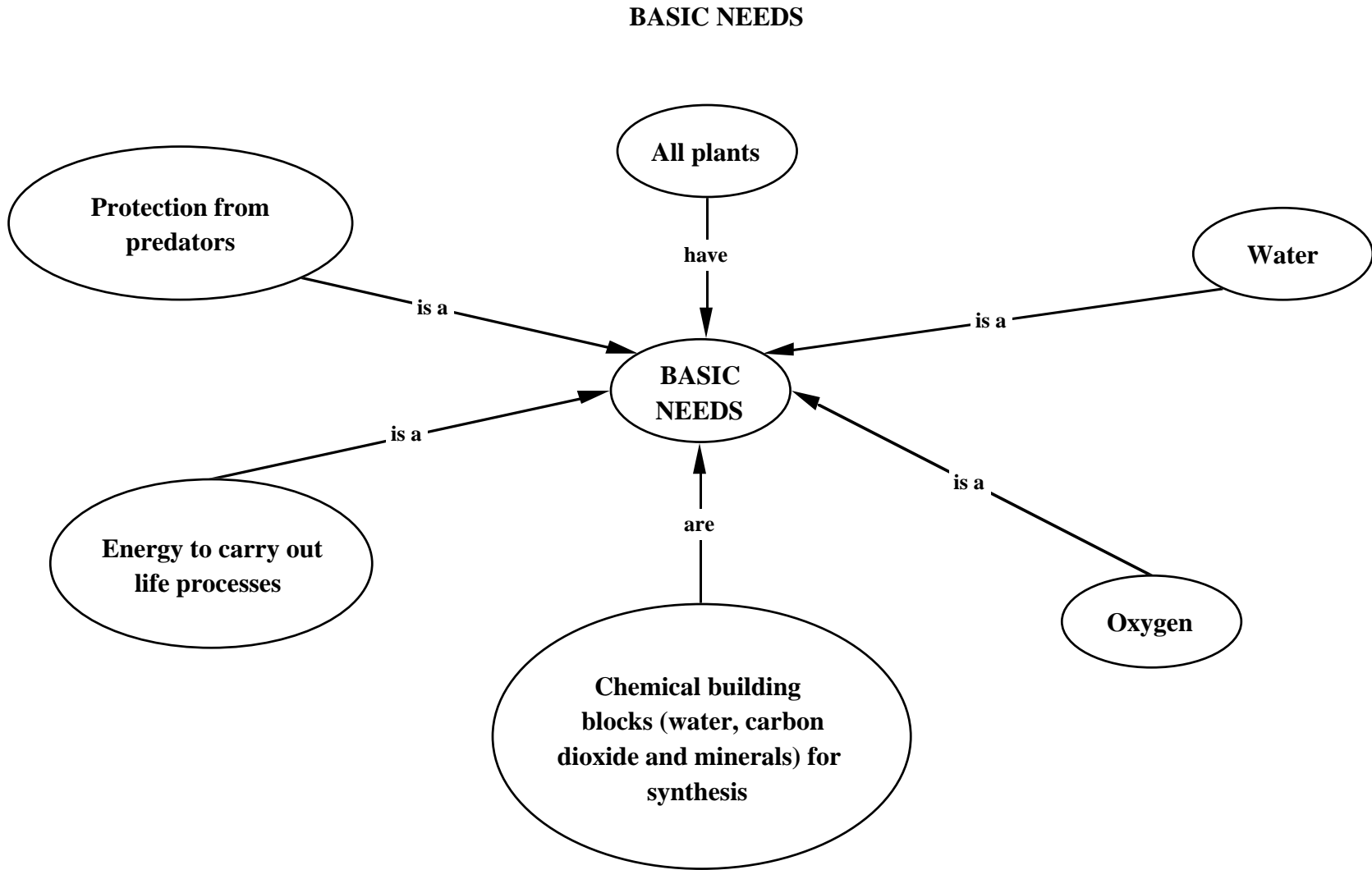


ADAPTATION

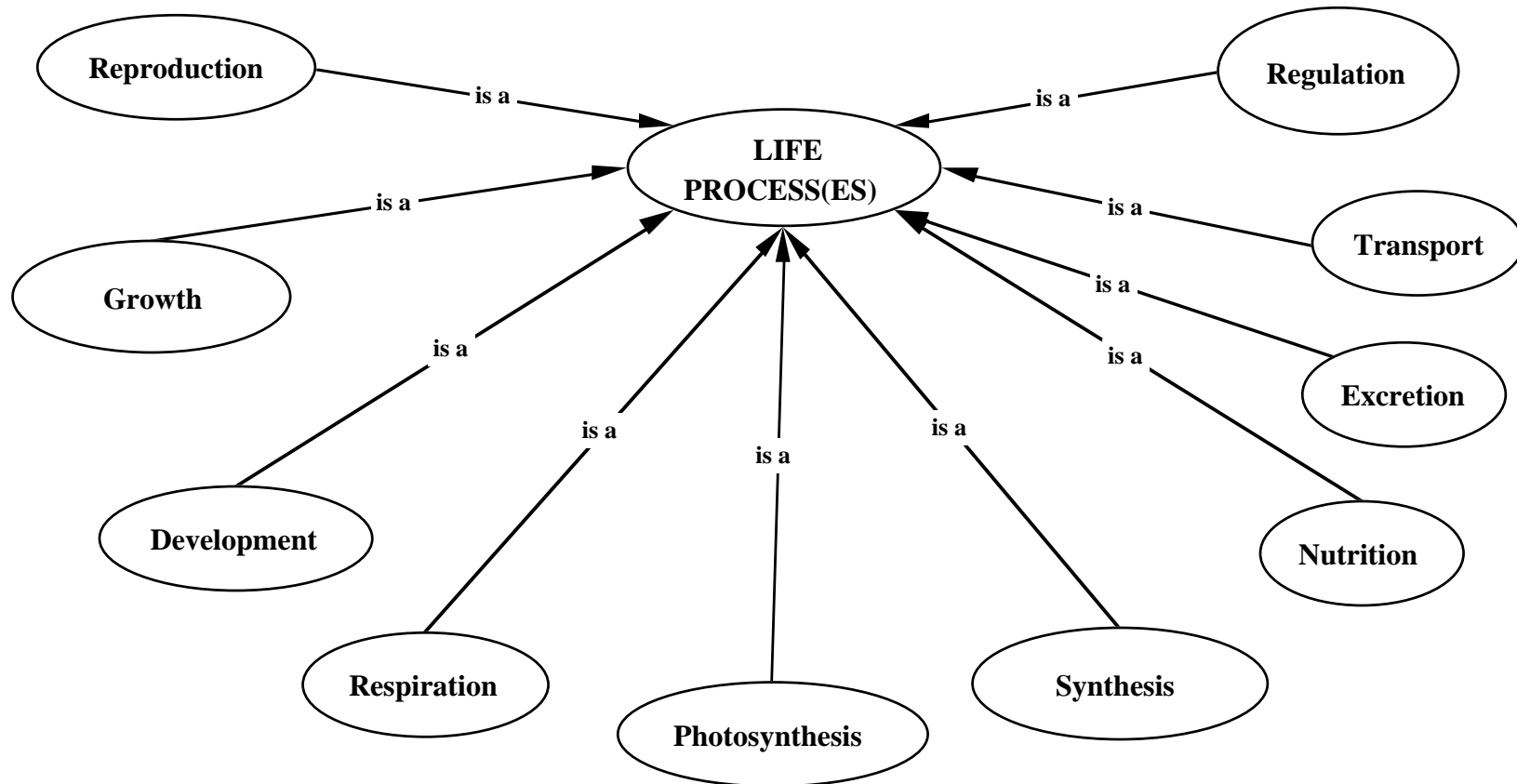


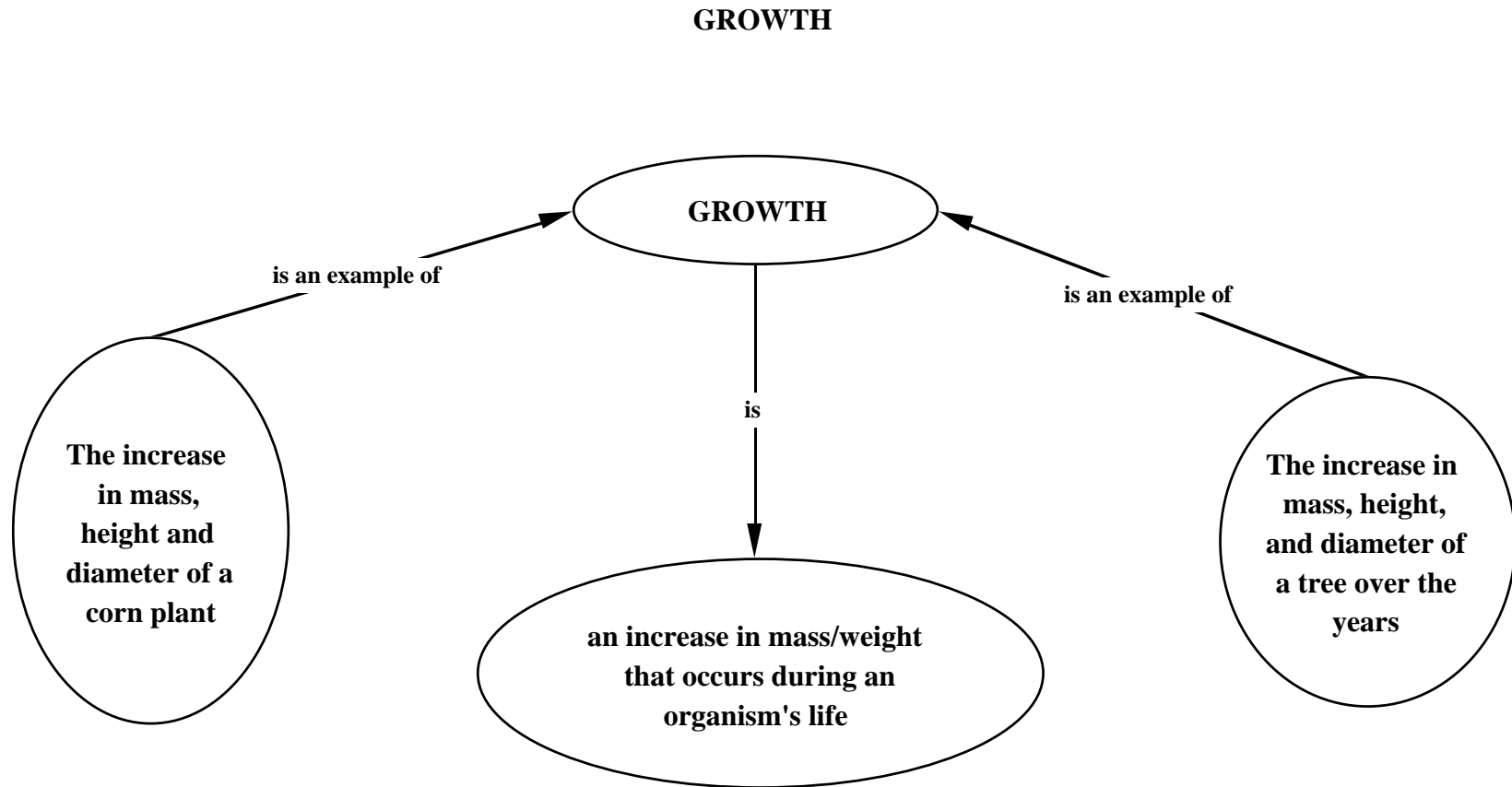
SURVIVAL: ORGANISMS AND SPECIES





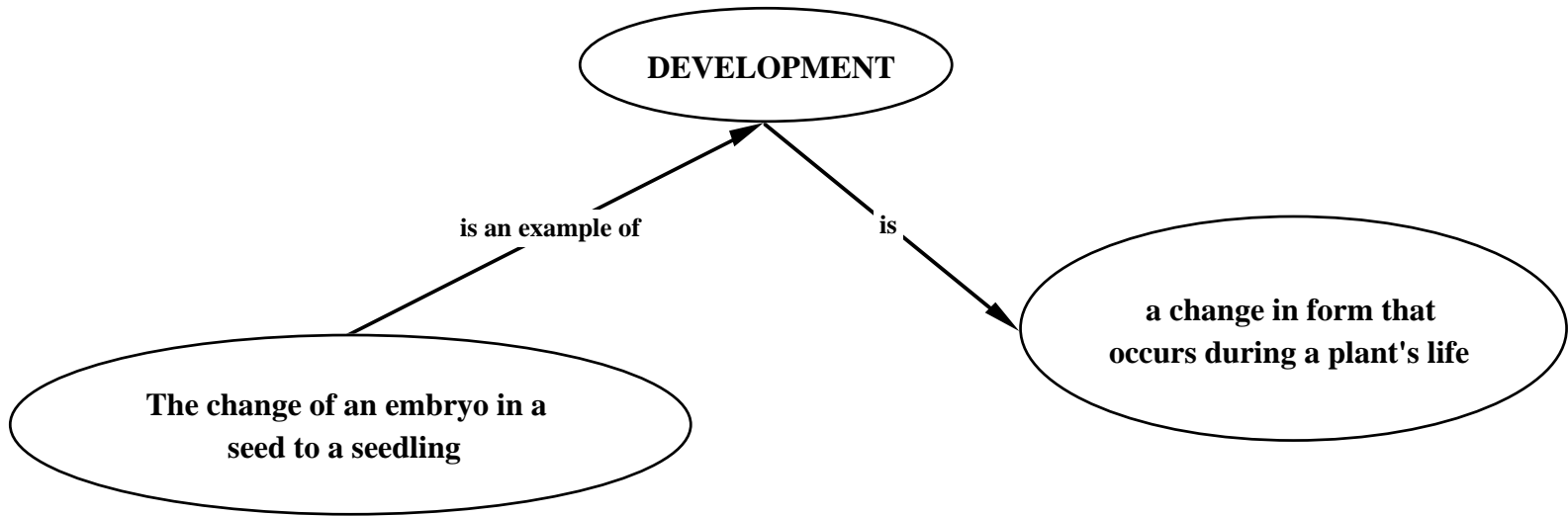
LIFE PROCESSES OF PLANTS





consists of

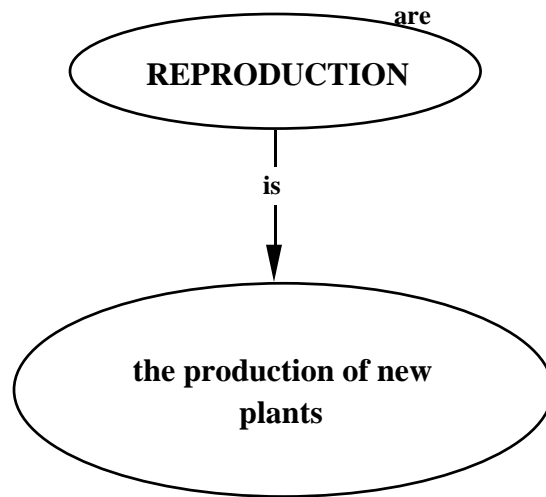
DEVELOPMENT



is a

REPRODUCTION

is composed of



reproduce **comprise**
 approximately

PHOTOSYNTHESIS

the conversion of light energy from
the sun into energy rich compounds



is

PHOTOSYNTHESIS

serve a function in

serve a function in

serve a function in

are

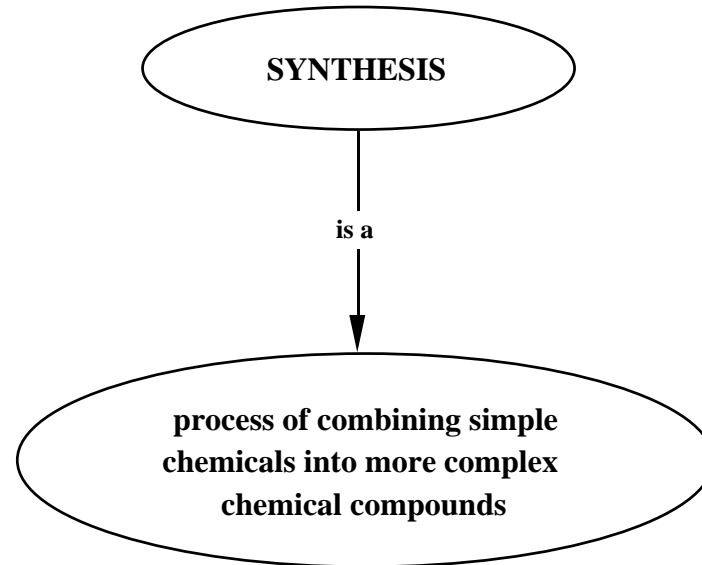
are

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SYNTHESIS



of

of

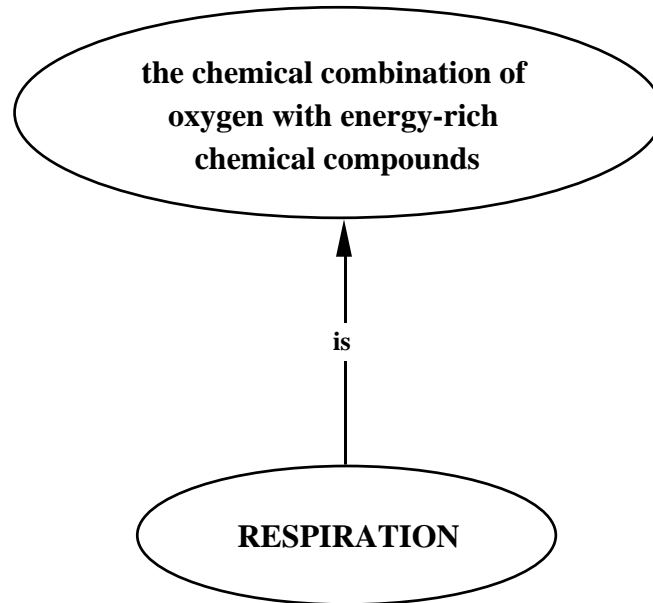
of

**enable flowering
plants to carry out**

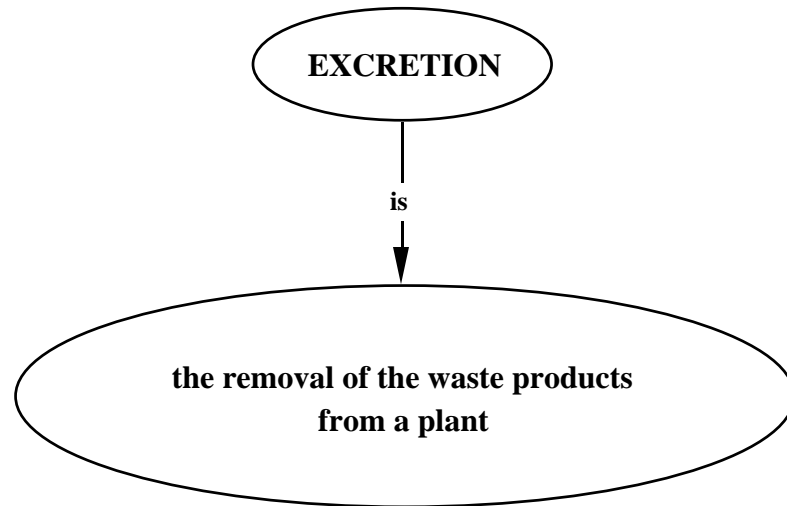
**enable flowering
plants to carry out**

**enable flowering
plants to carry out**

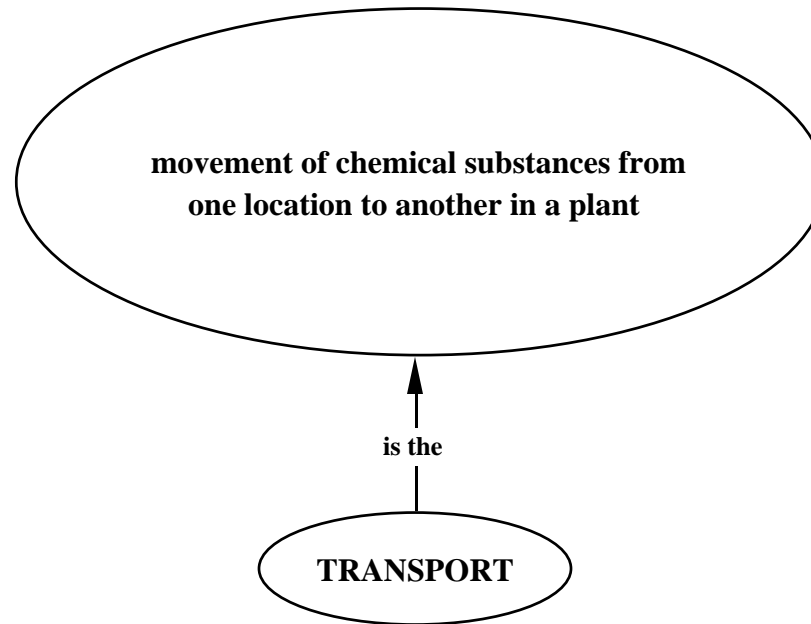
RESPIRATION



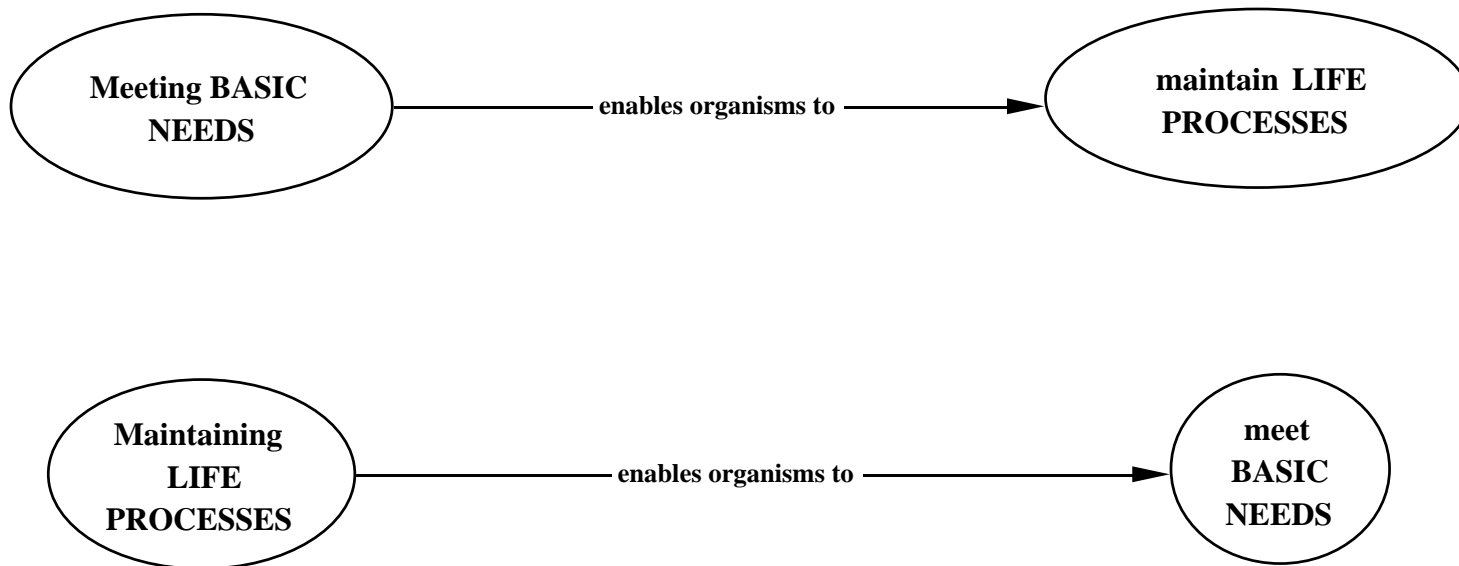
EXCRETION



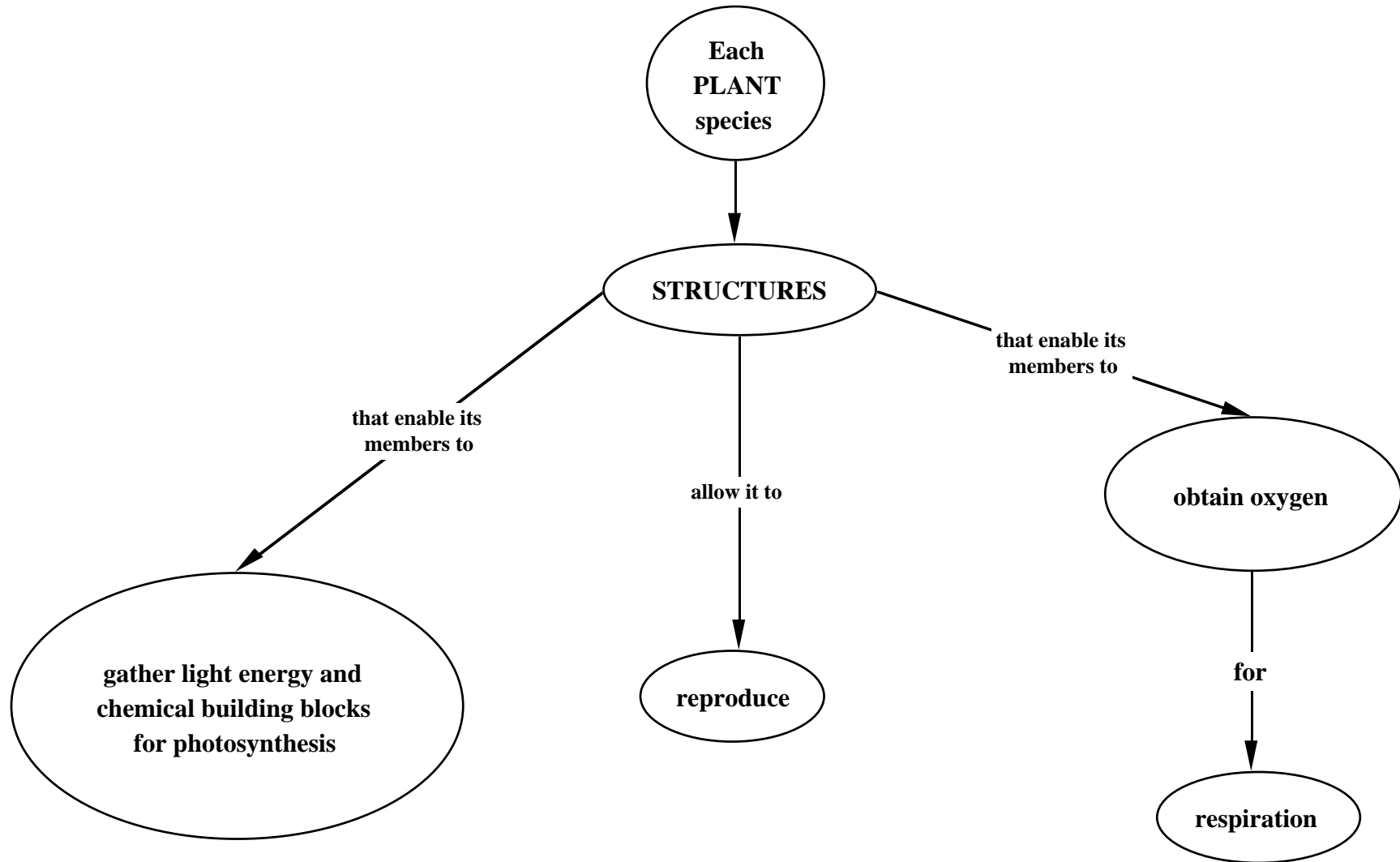
TRANSPORT



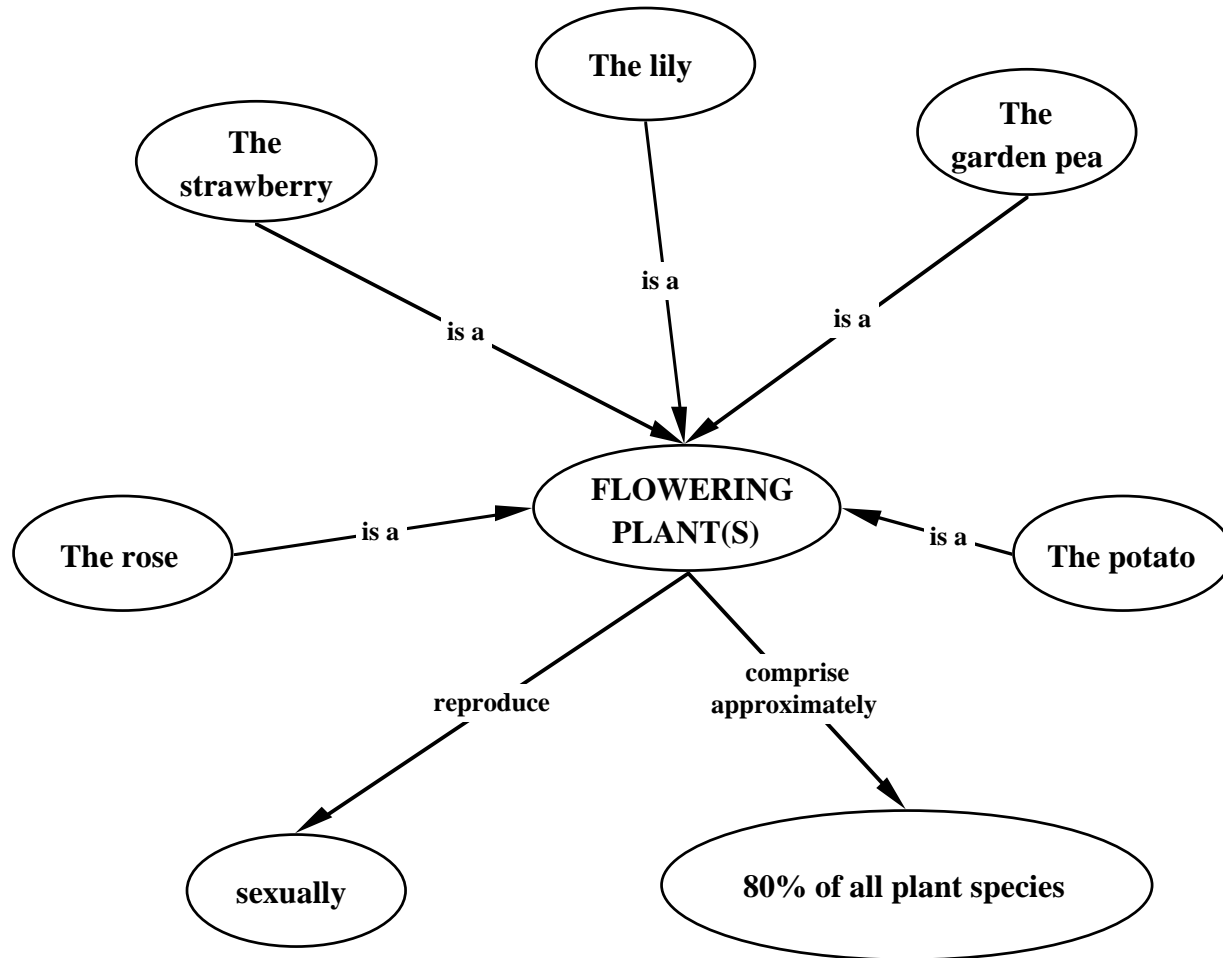
INTERDEPENDENCE OF BASIC NEEDS AND LIFE PROCESSES



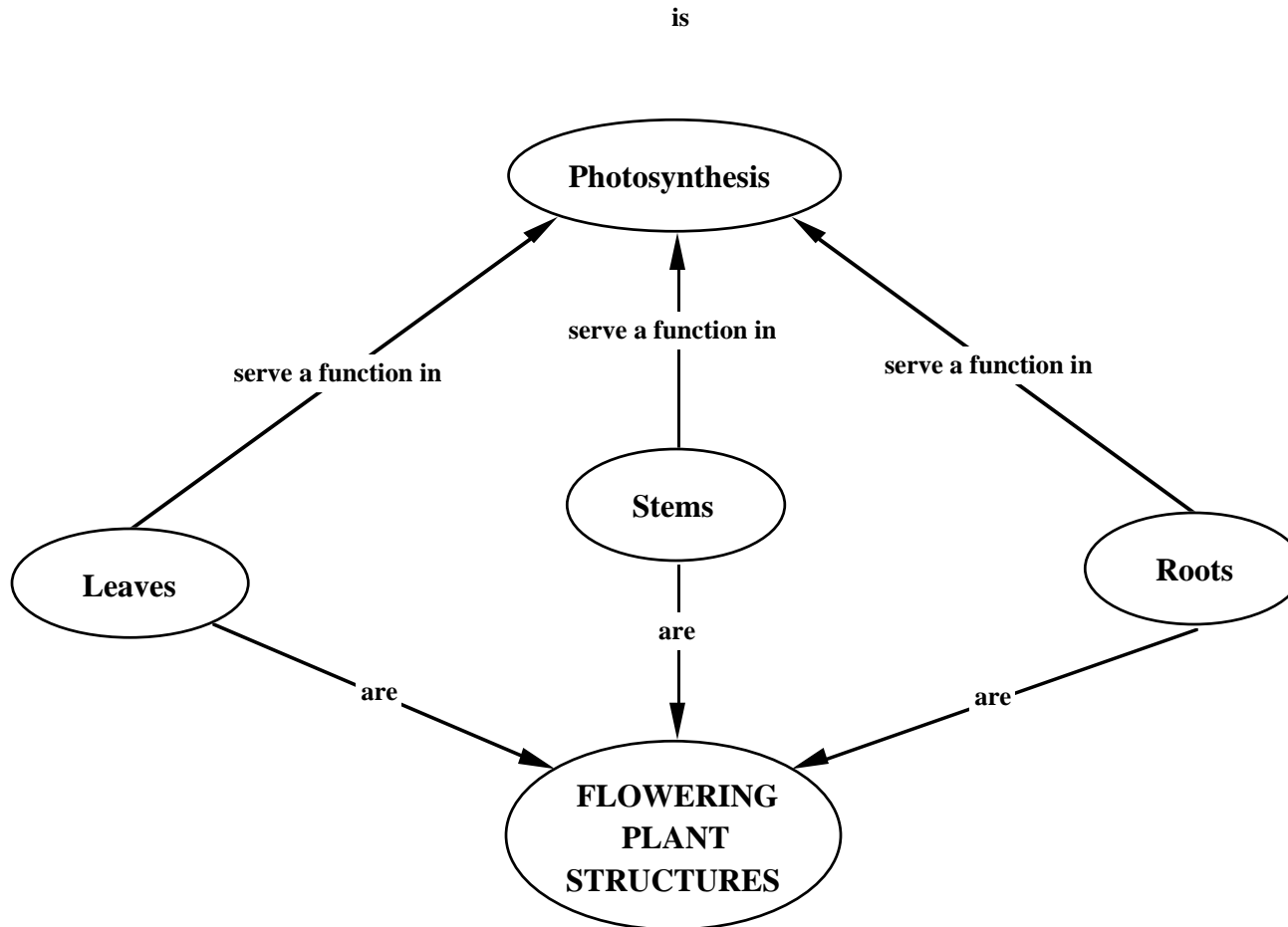
PLANT STRUCTURES: MEETING BASIC NEEDS



PLANT STRUCTURES: FLOWERING PLANTS

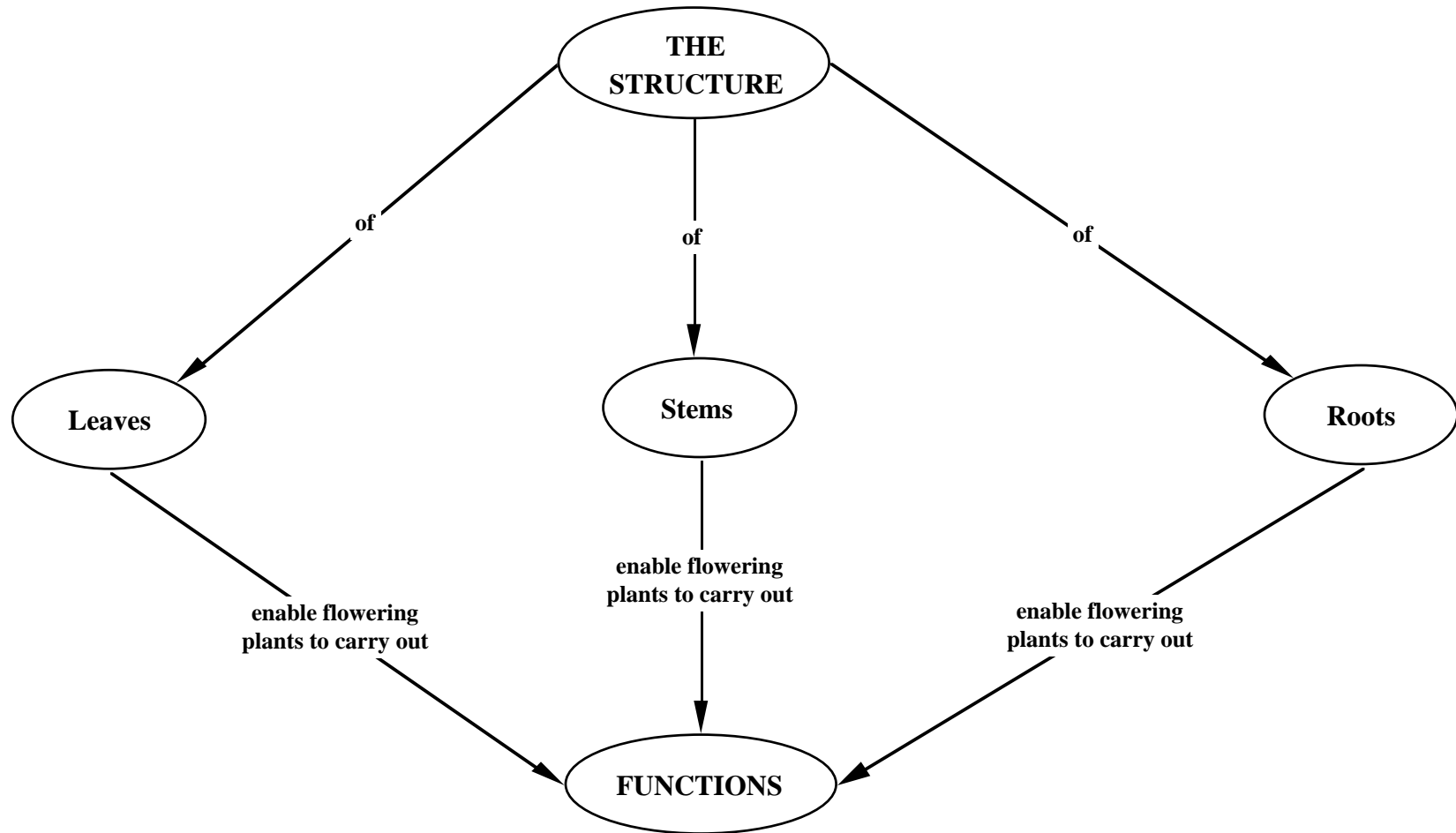


FLOWERING PLANT STRUCTURES: PHOTOSYNTHESIS FUNCTION

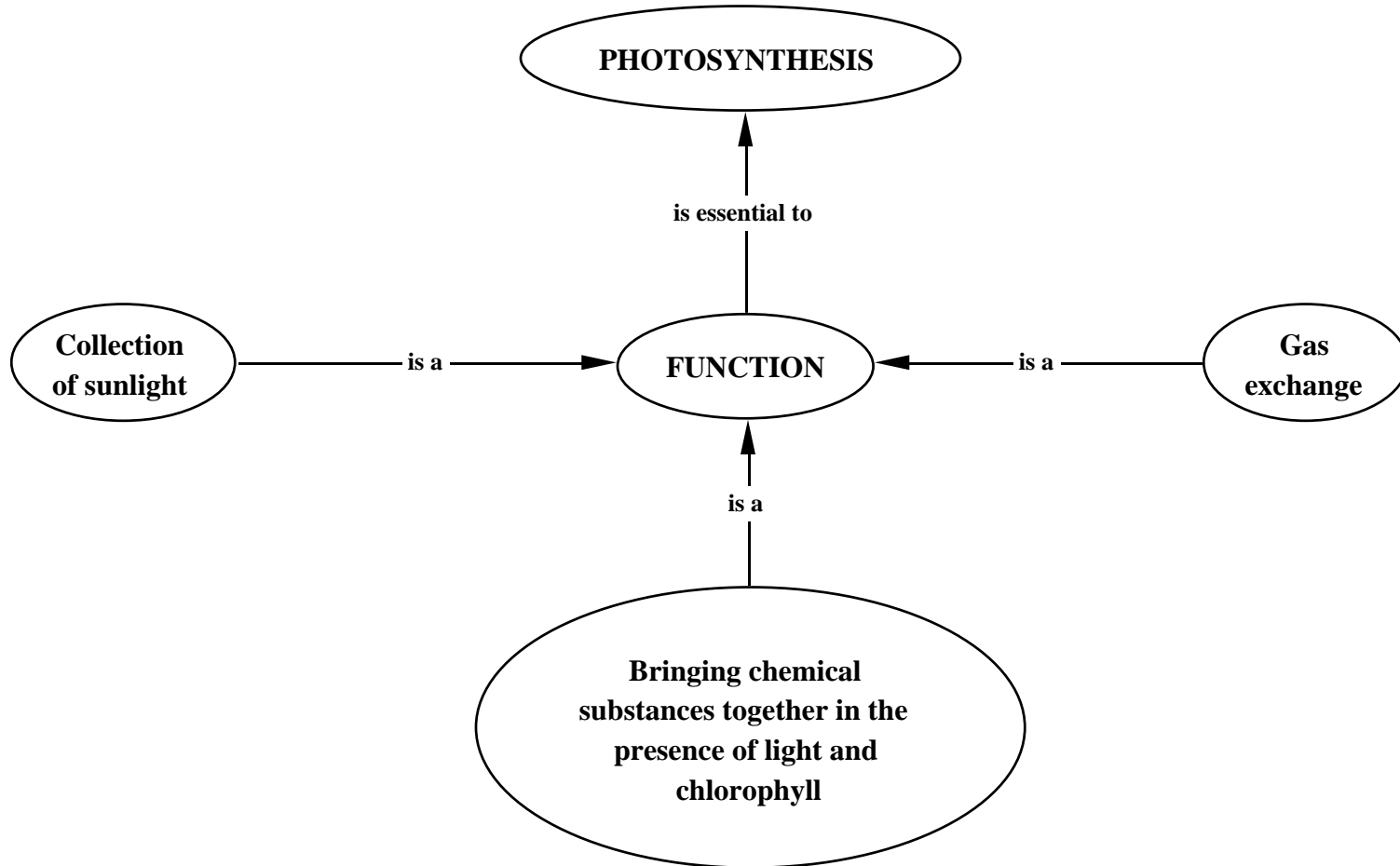


is a

THE STRUCTURE-FUNCTION RELATIONSHIP

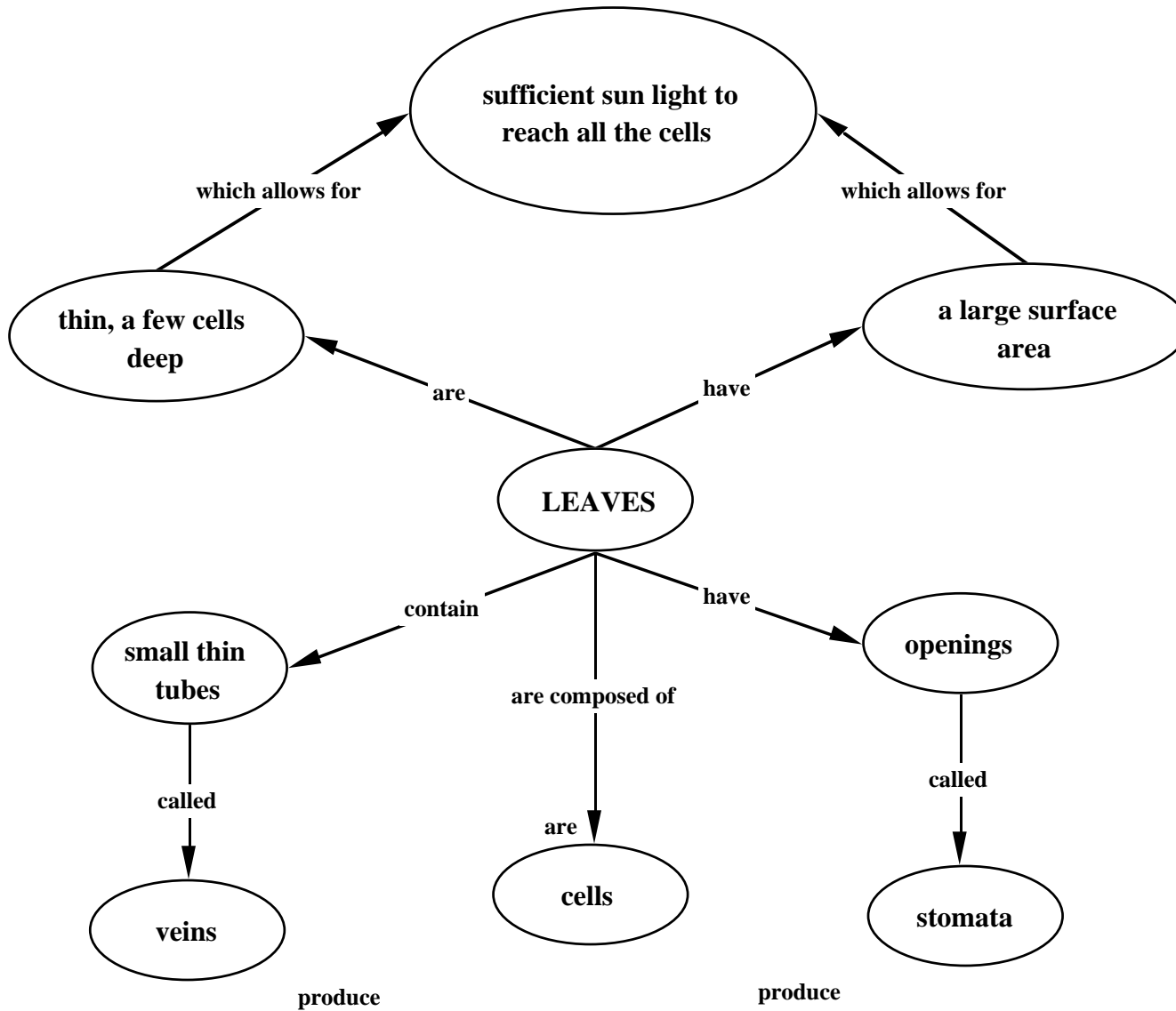


PHOTOSYNTHESIS: FUNCTIONS

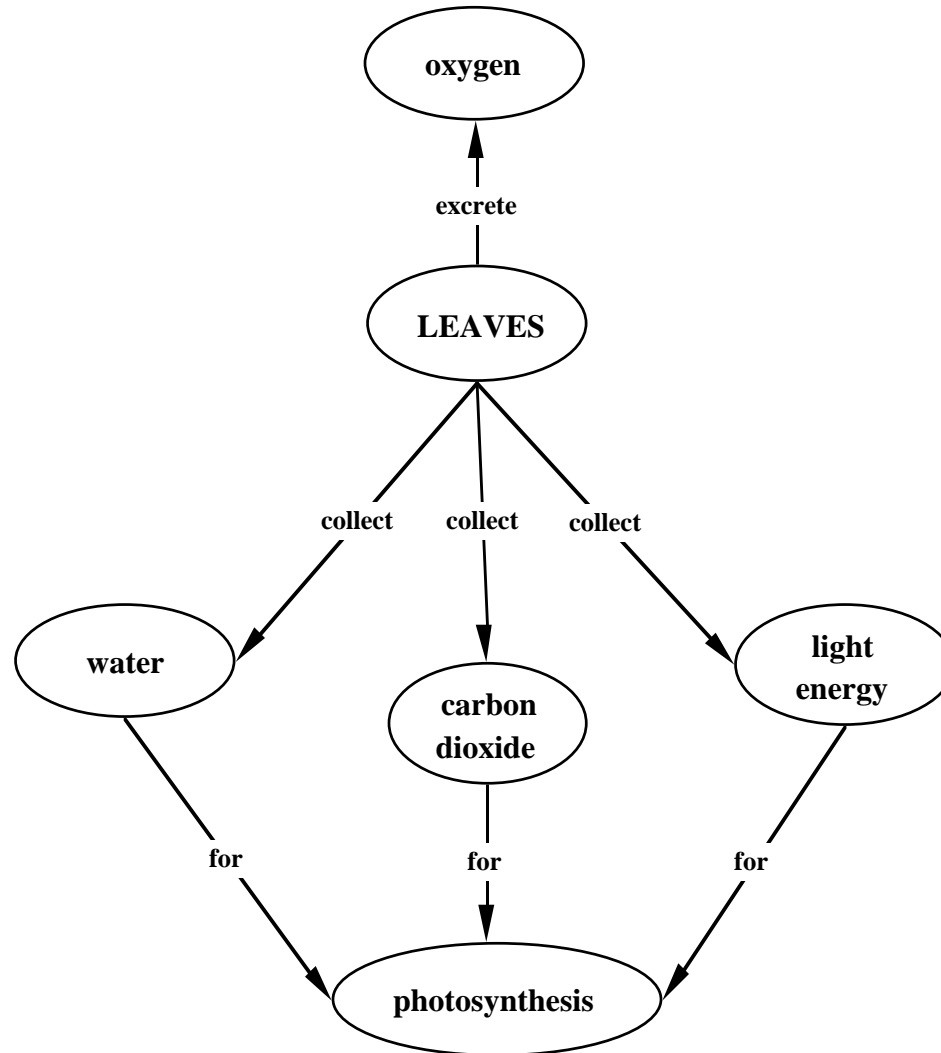


are composed of

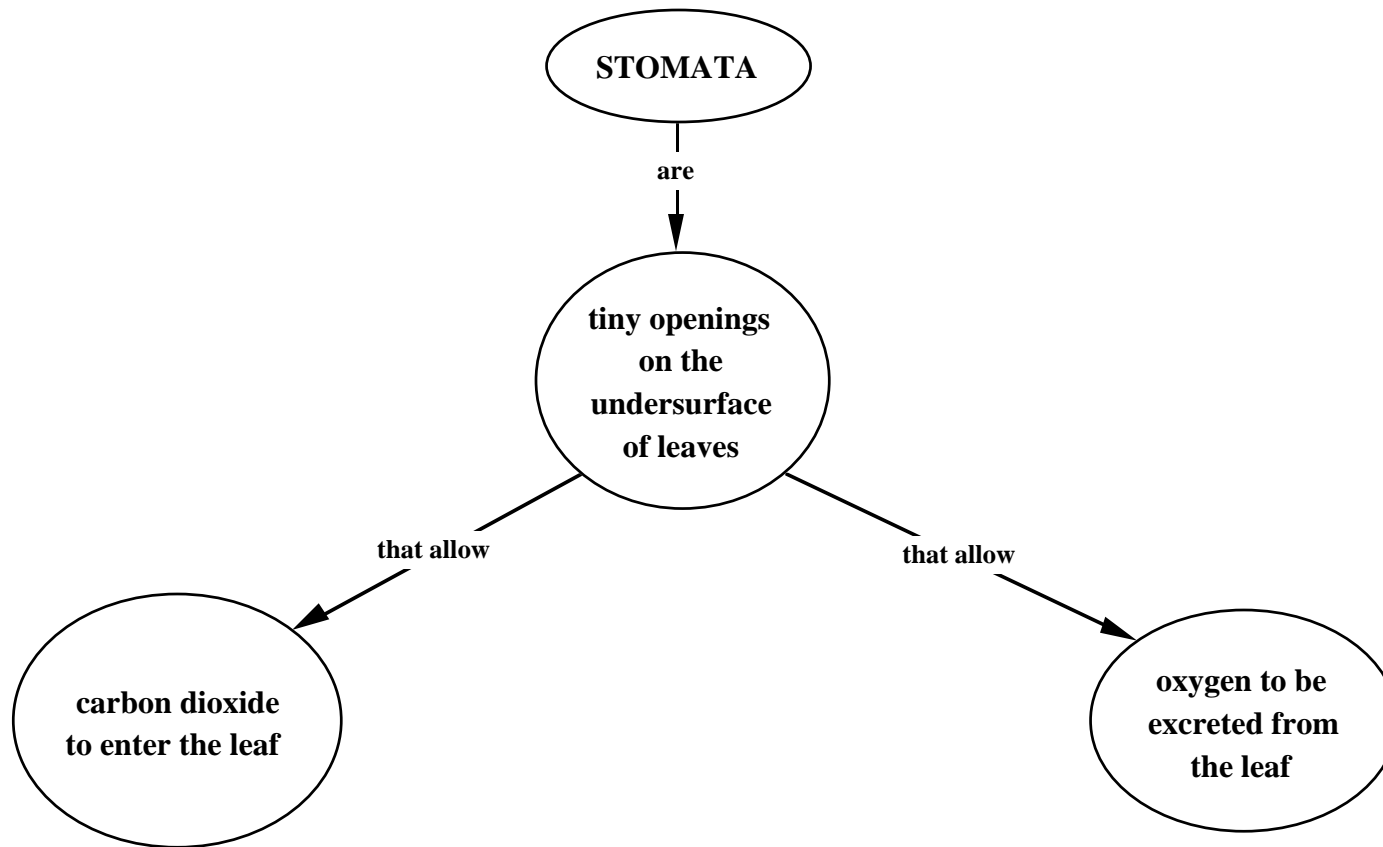
LEAF STRUCTURE



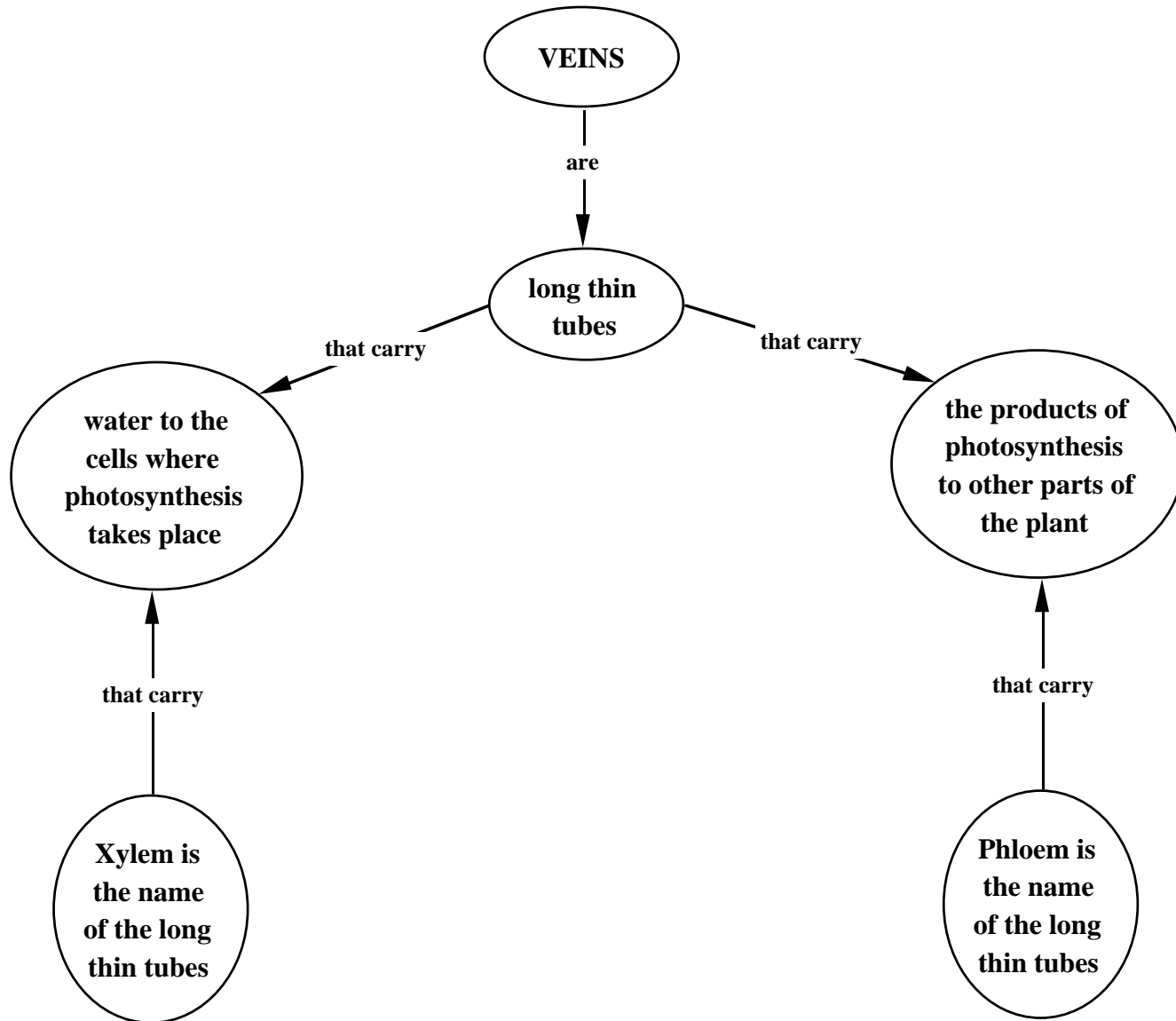
produce
LEAF STRUCTURE AND FUNCTION



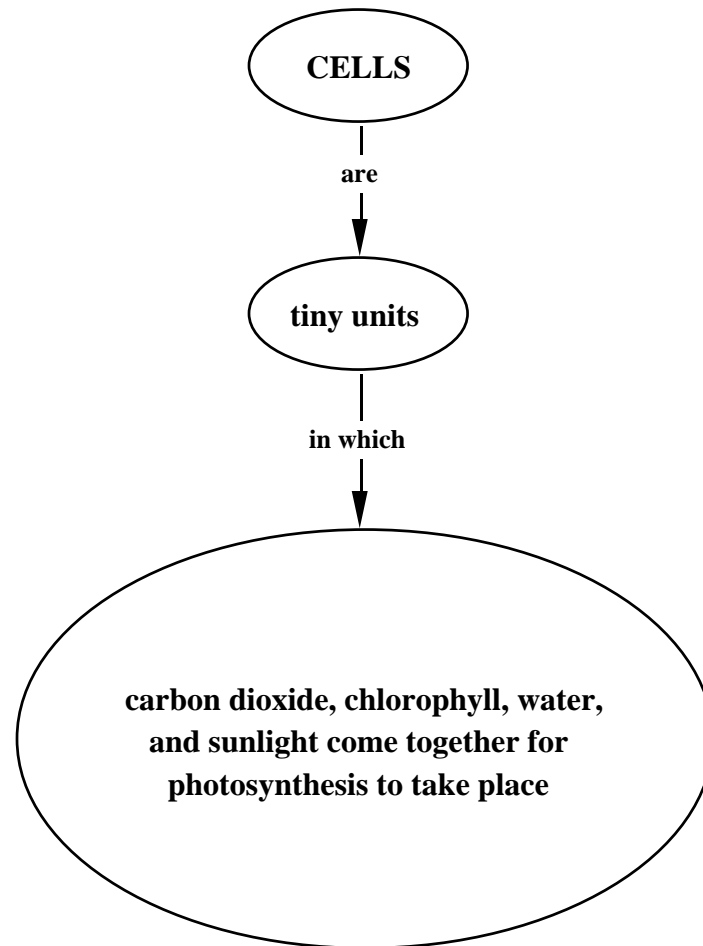
LEAF STRUCTURE AND FUNCTION: STOMATA



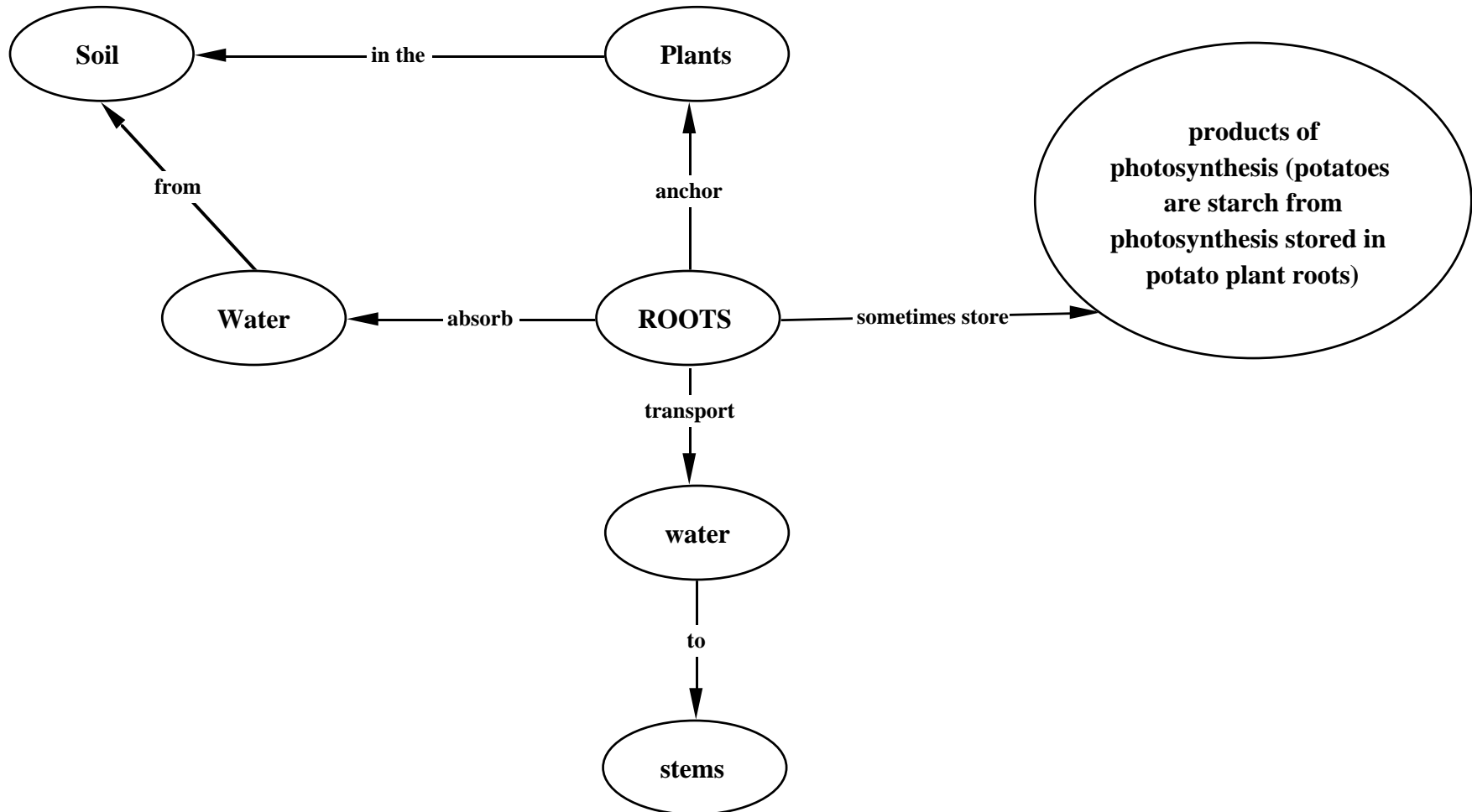
LEAF STRUCTURE AND FUNCTION: VEINS



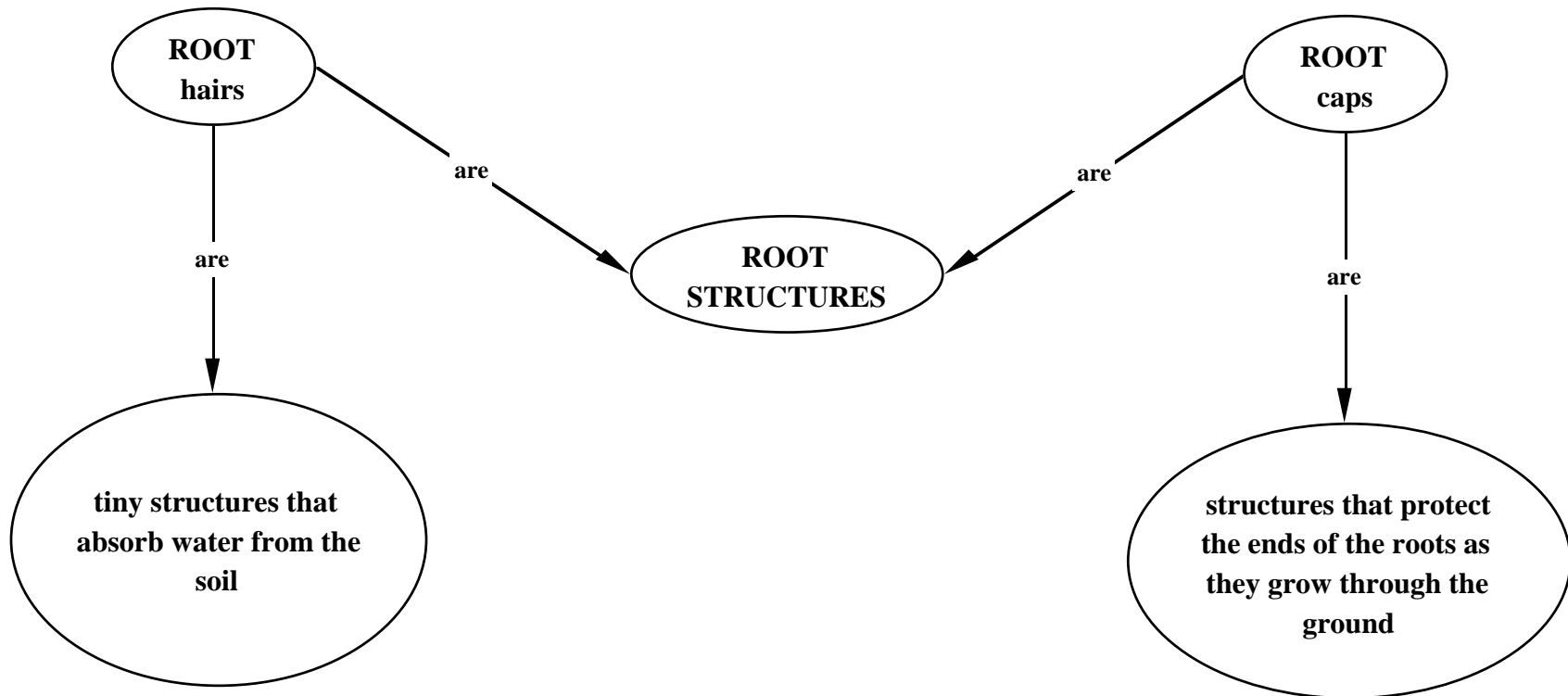
LEAF STRUCTURE: CELLS



ROOT STRUCTURE AND PHOTOSYNTHESIS FUNCTIONS

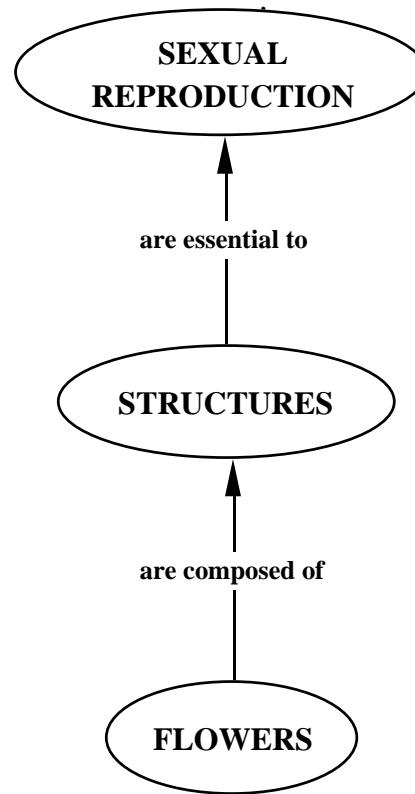


ROOT STRUCTURE



is essential to

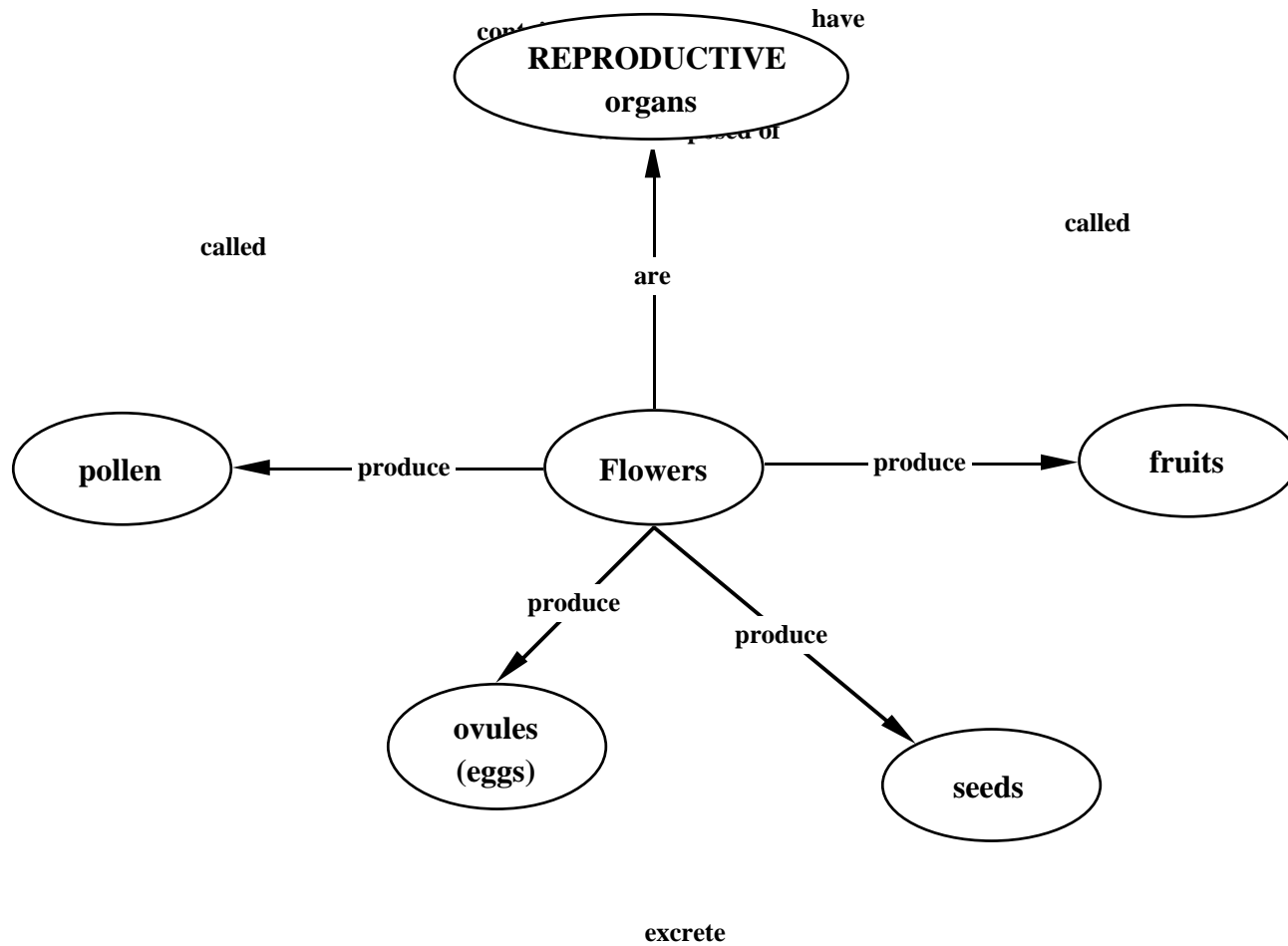
FLOWERING PLANT STRUCTURES: SEXUAL REPRODUCTION



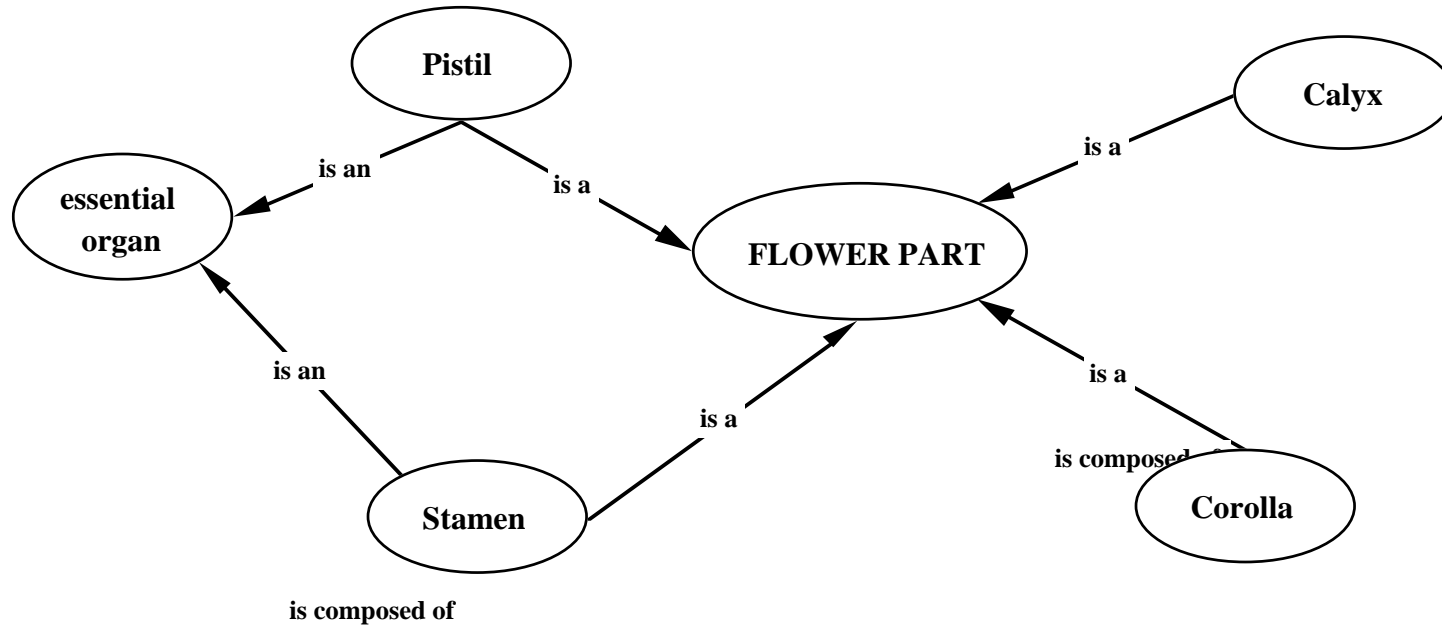
which allows for

which allows for

are have
SEXUAL REPRODUCTIVE FUNCTIONS



FLOWER STRUCTURE AND REPRODUCTIVE FUNCTIONS

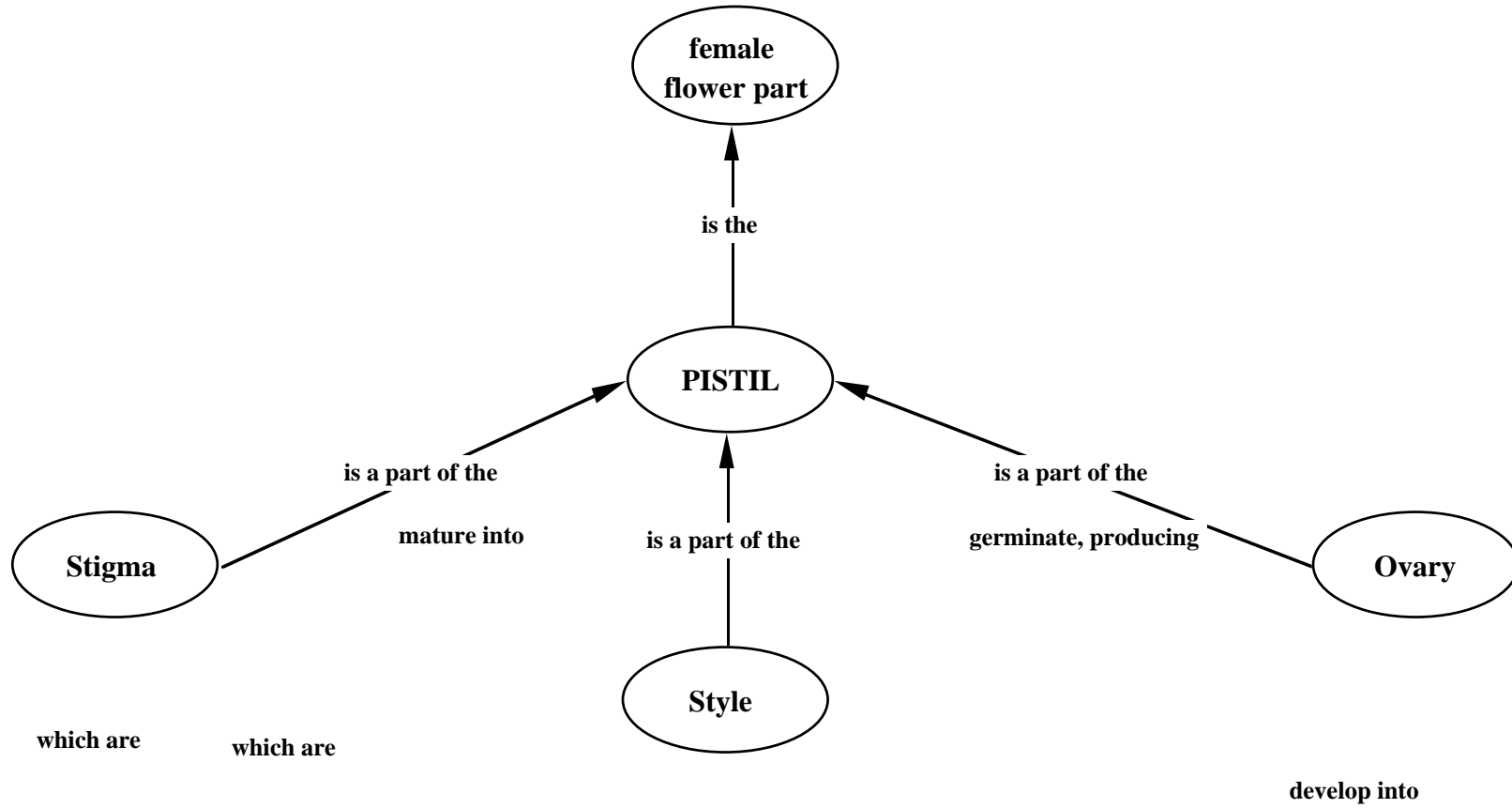


colors attract

smells attract

which

PISTIL: STRUCTURE AND FUNCTION



which are

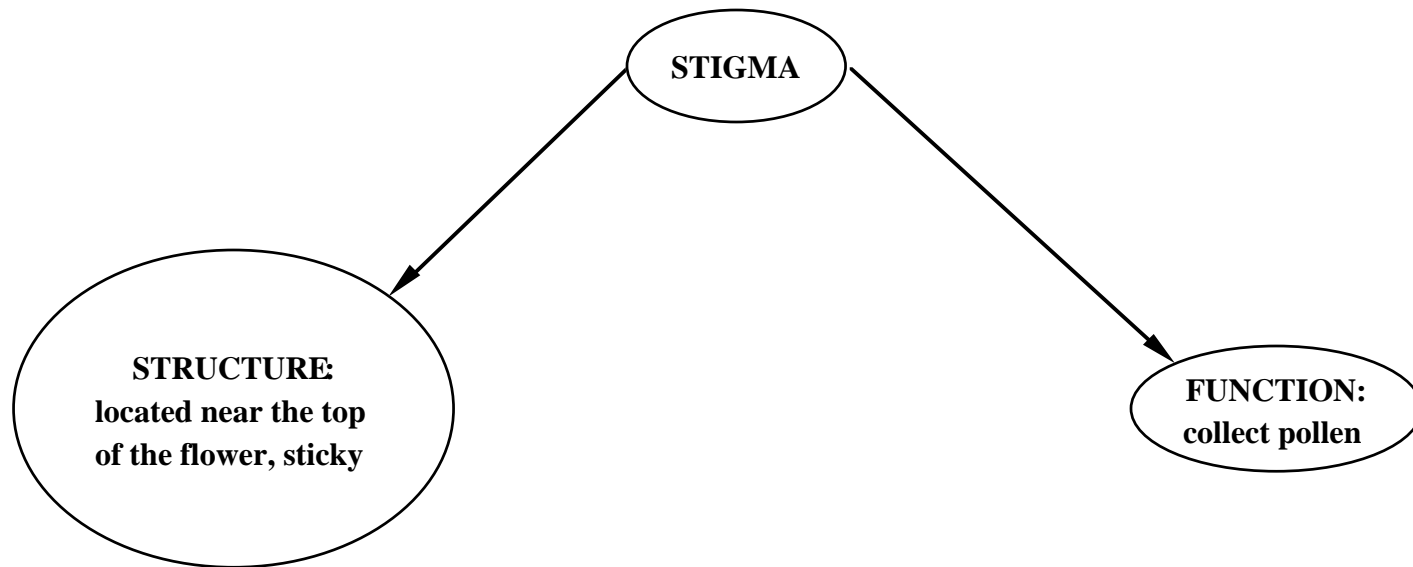
which are

develop into

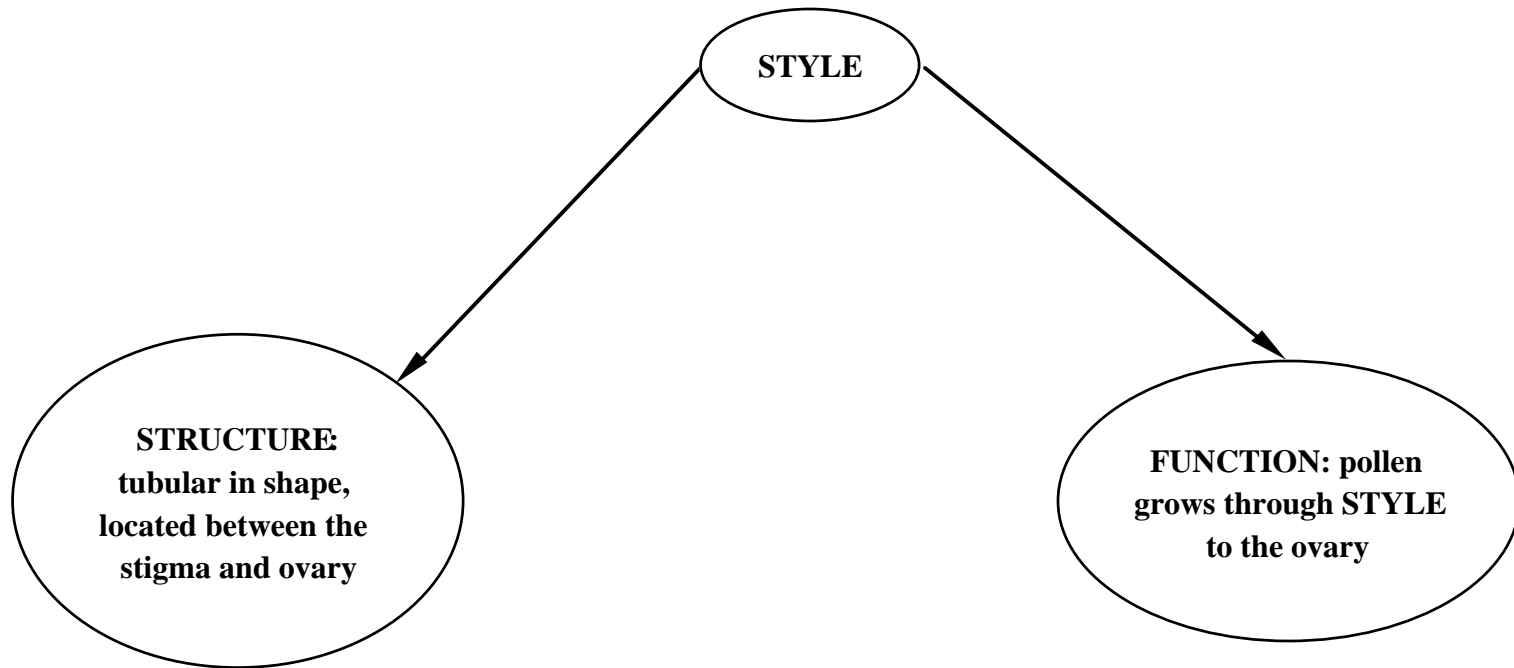
produce

produce

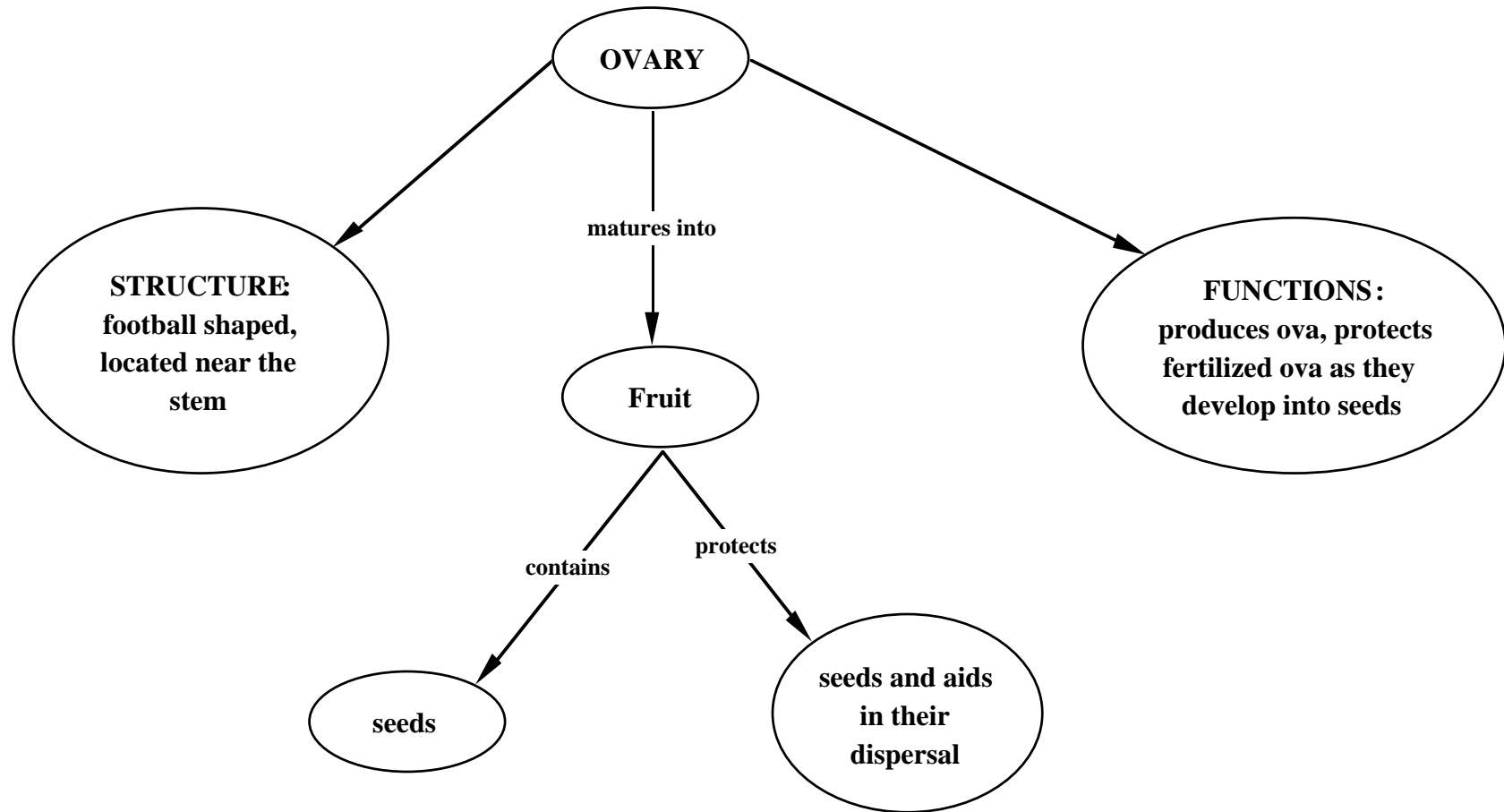
STIGMA: STRUCTURE AND FUNCTION
open to grow, develop, and produce



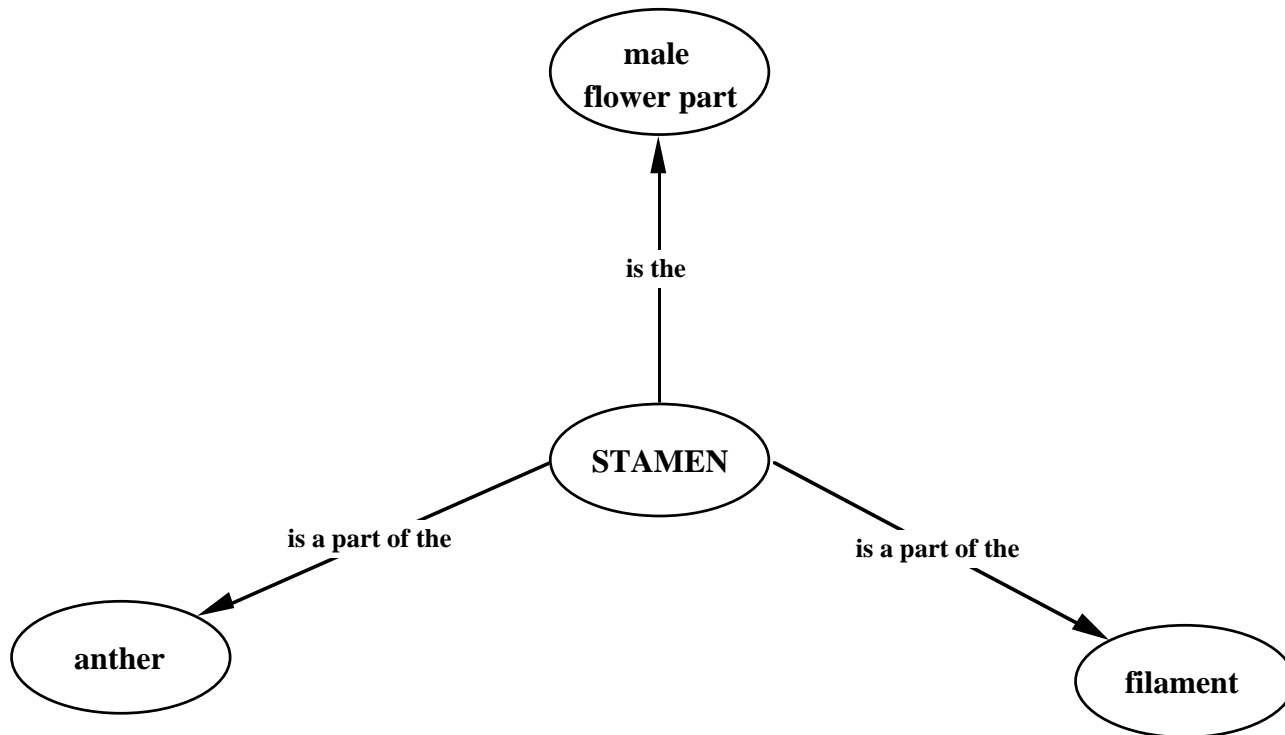
STYLE: STRUCTURE AND FUNCTION



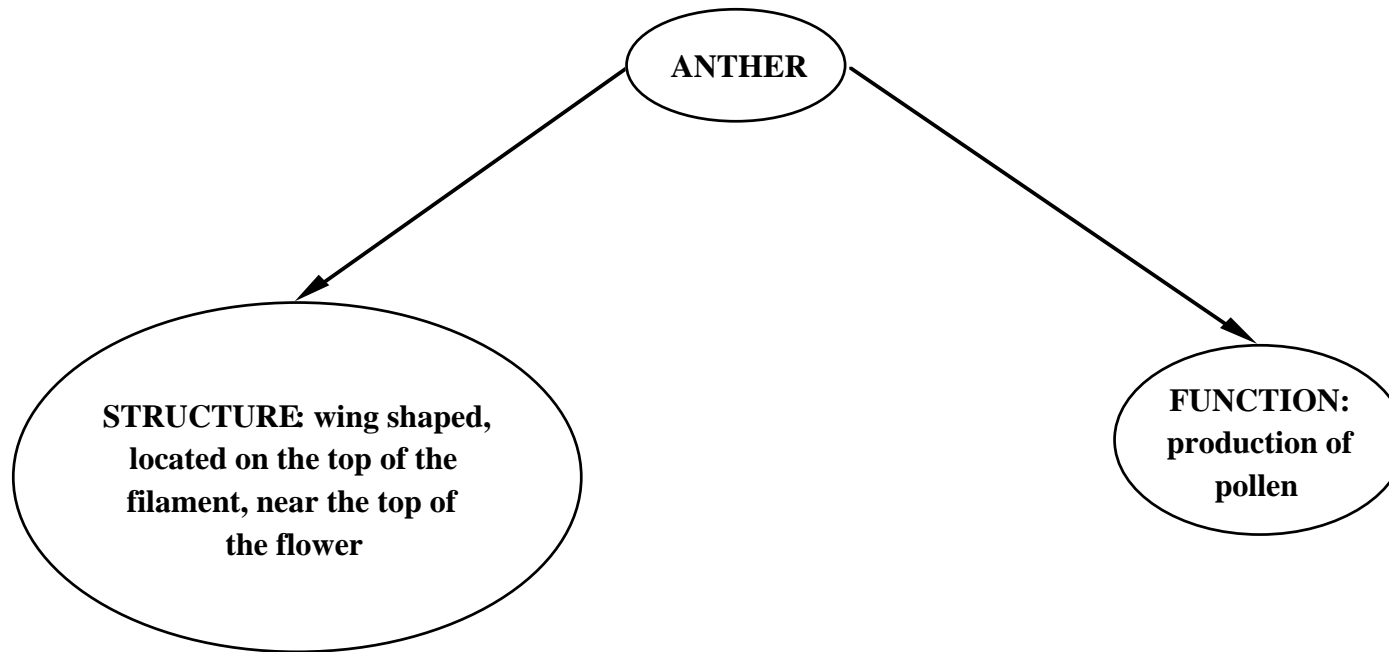
OVARY: STRUCTURE AND FUNCTIONS



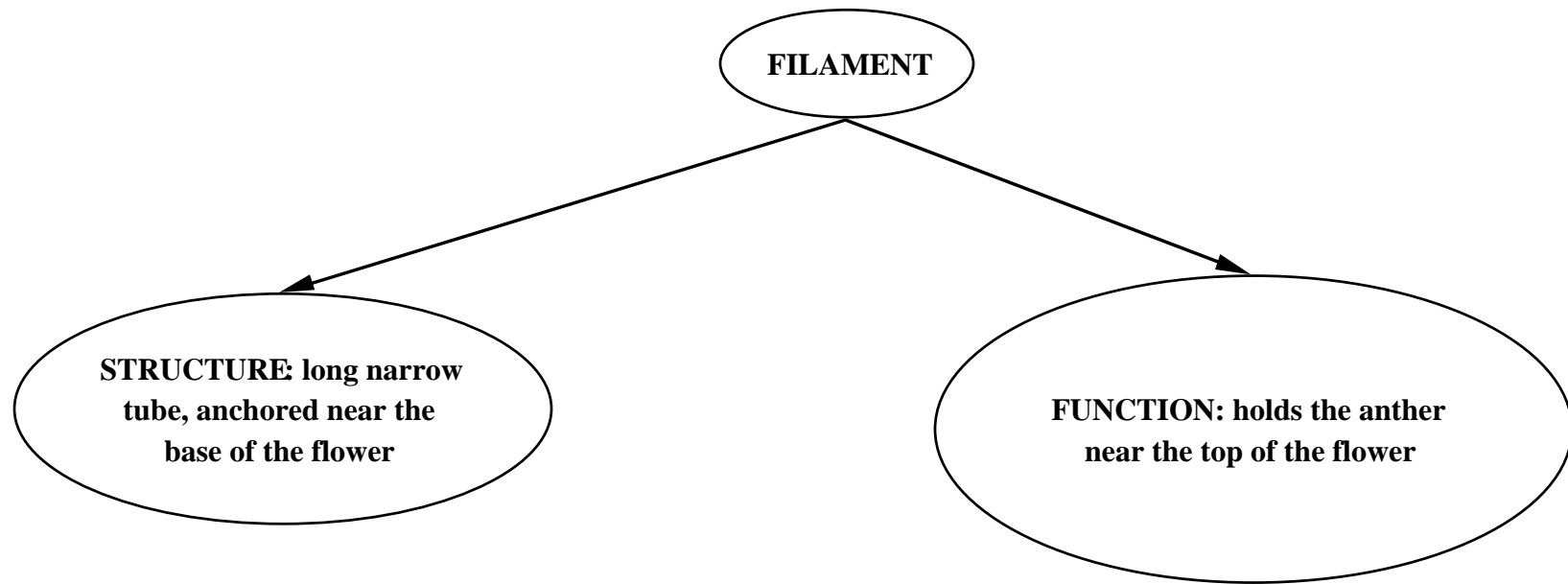
STAMEN: STRUCTURES AND FUNCTION



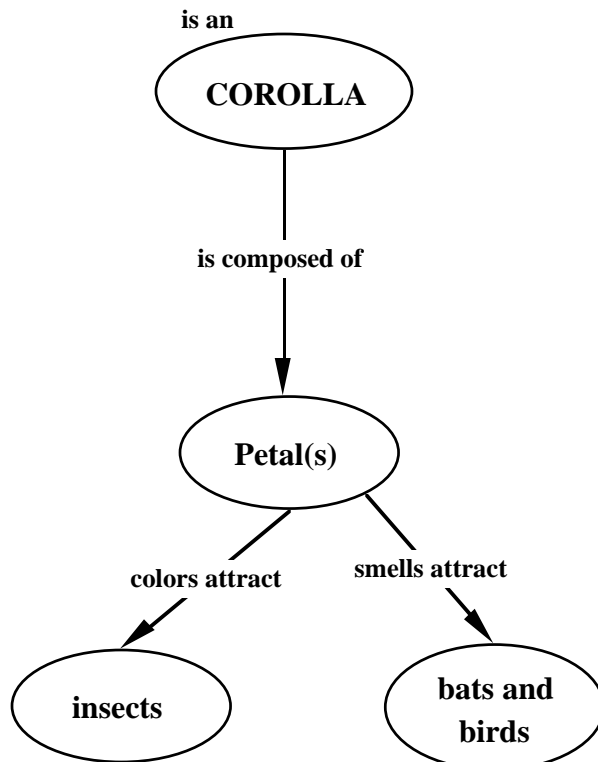
ANTHER: STRUCTURE AND FUNCTION



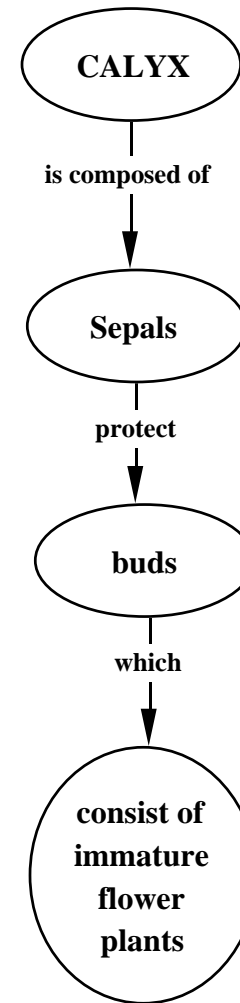
FILAMENT: STRUCTURE AND FUNCTION



COROLLA AND CALYX: STRUCTURE AND FUNCTION

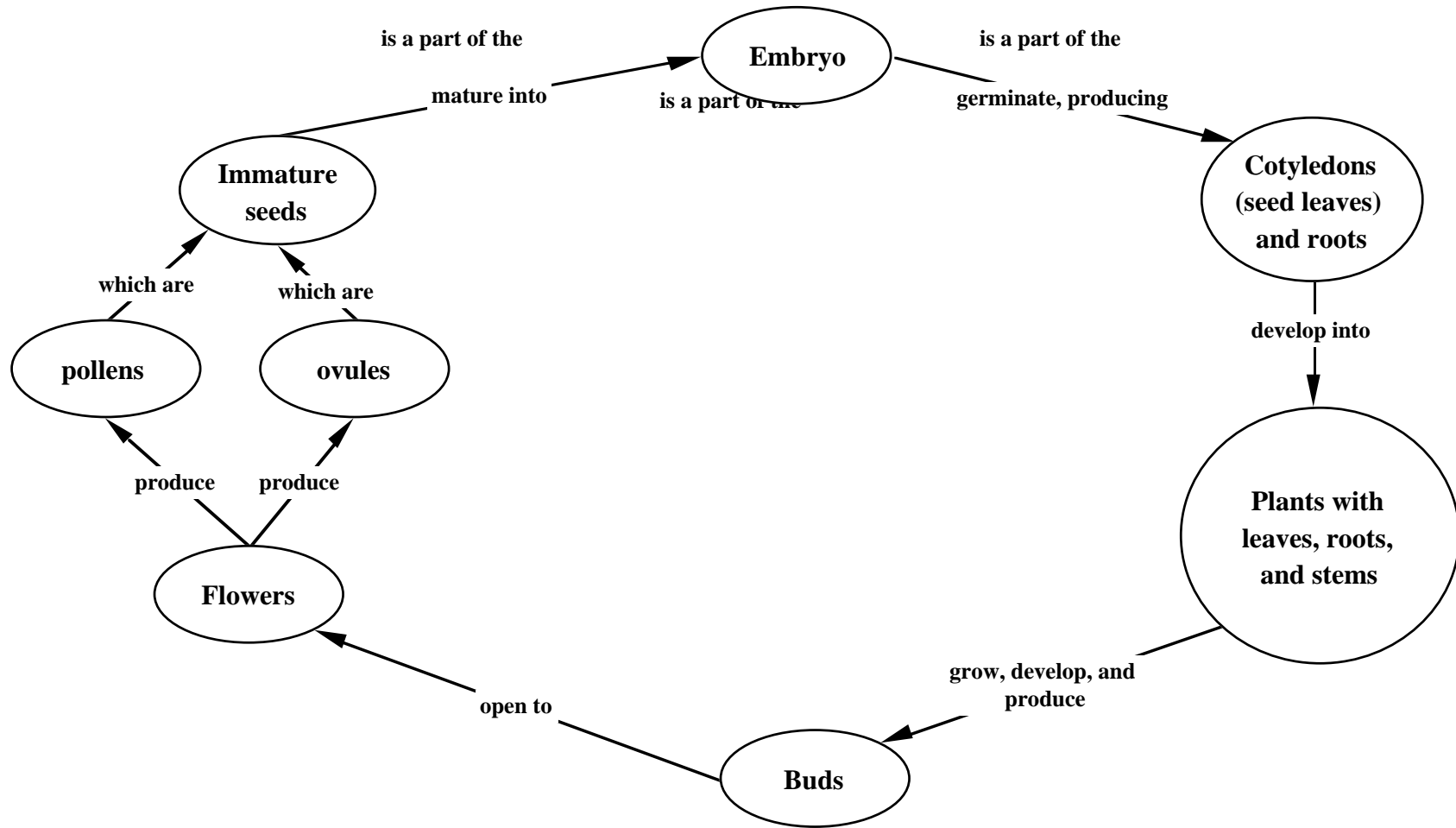


is a



is the

LIFE CYCLE: FLOWERING PLANTS

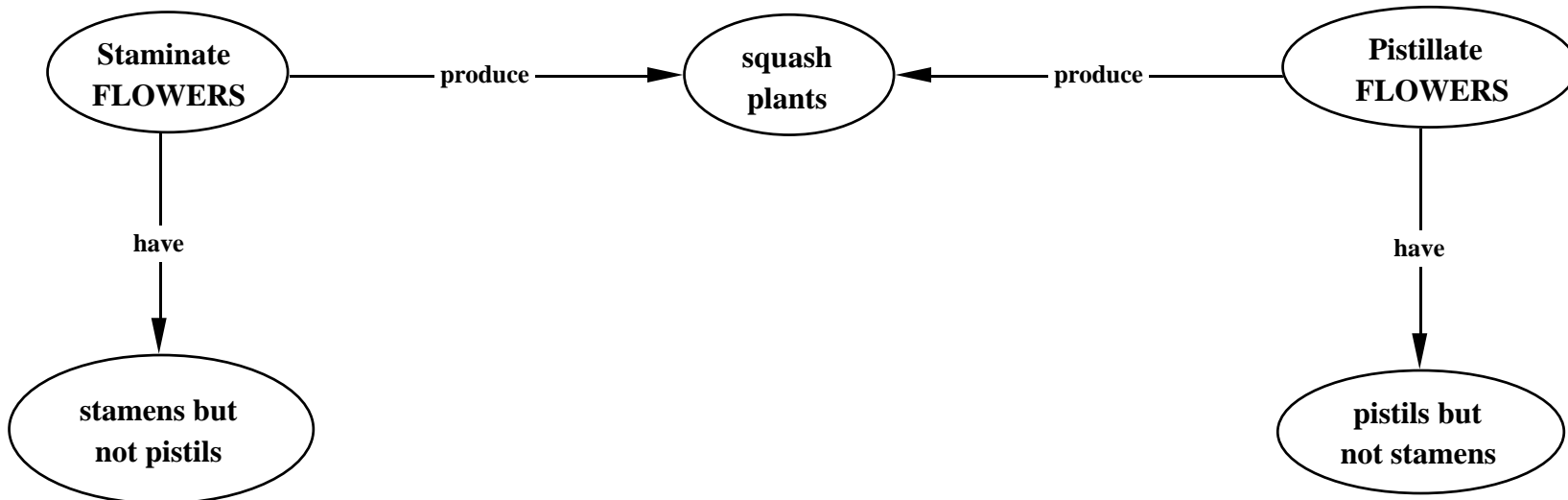


FLOWER TYPES
is

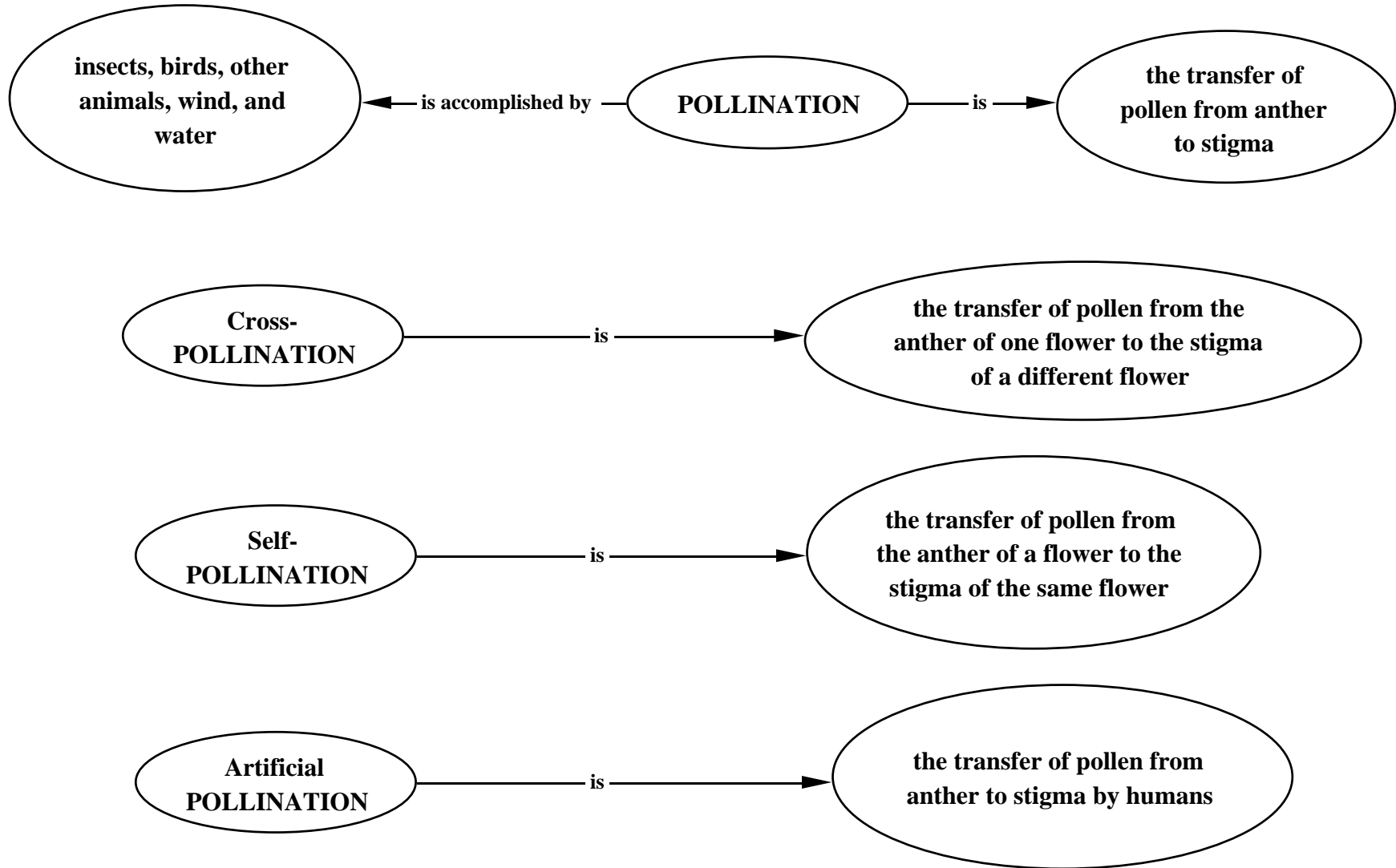
Apple blossoms produce complete FLOWERS



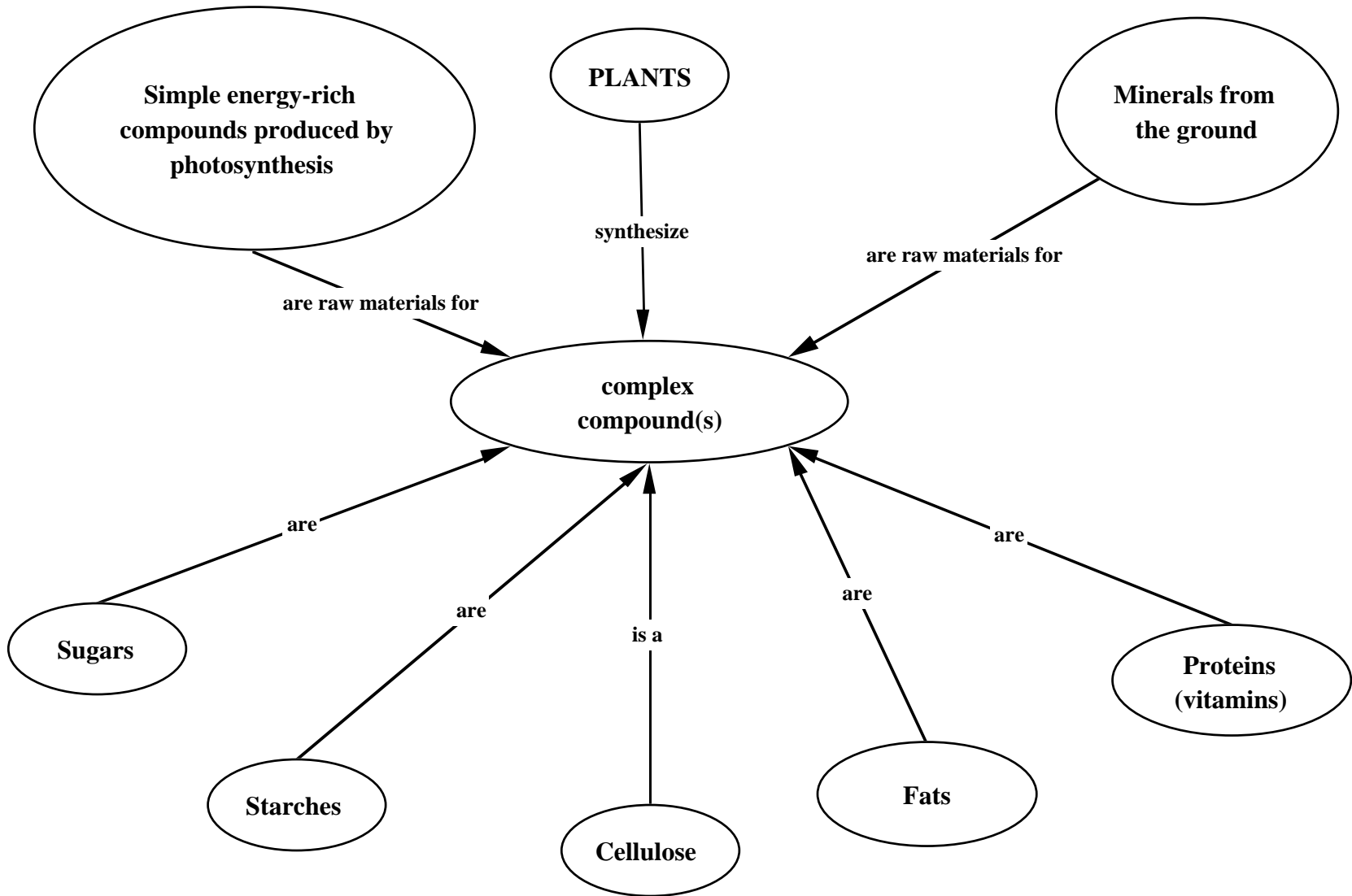
Squash plants produce incomplete FLOWERS



POLLINATION



PLANT SYNTHESIS

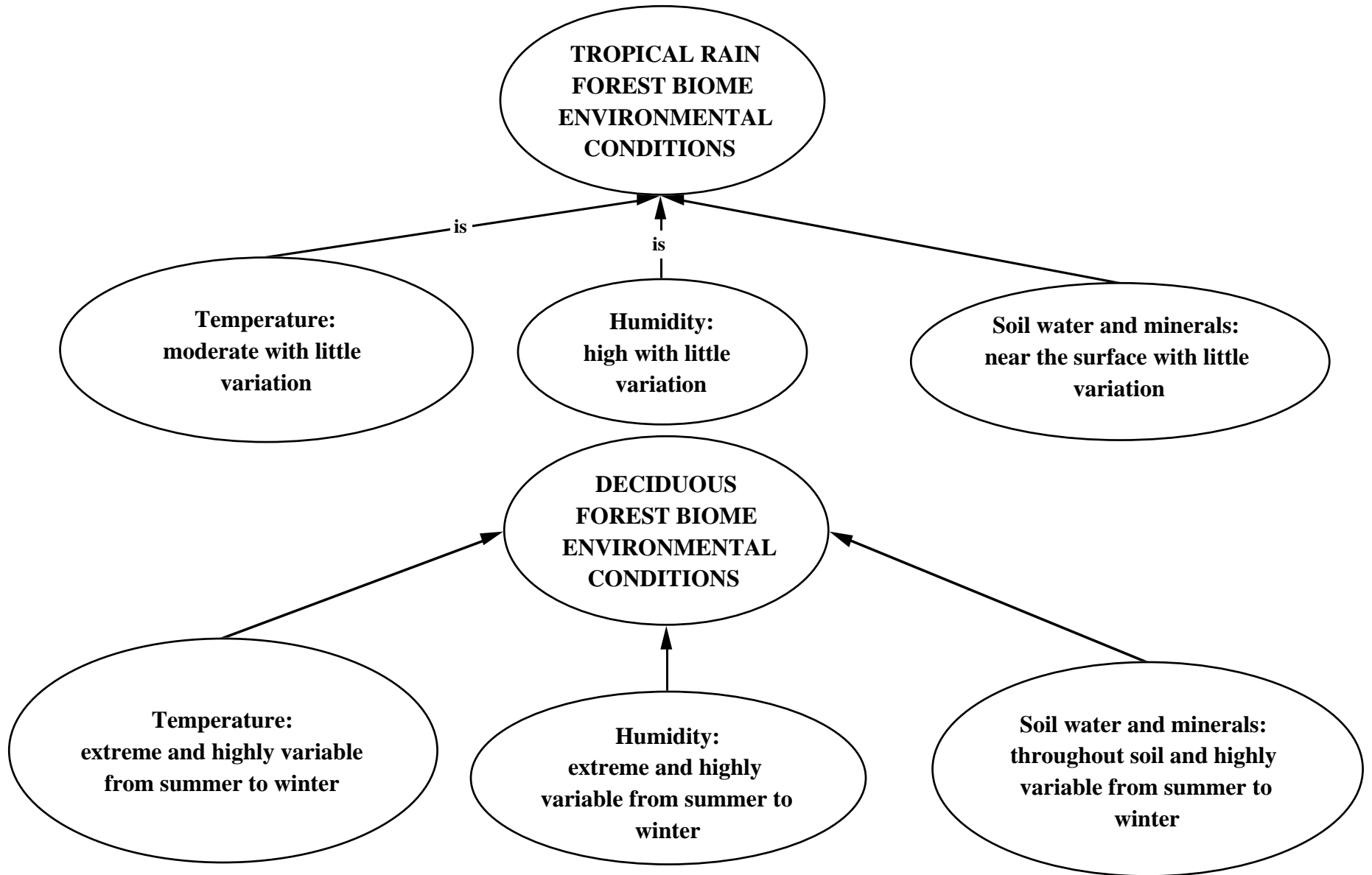


**PLANT DIVERSITY AND ADAPTATION : AN EXAMPLE
TREES IN THE TROPICAL RAIN FOREST AND
DECIDUOUS FOREST BIOMES DIVERSITY**

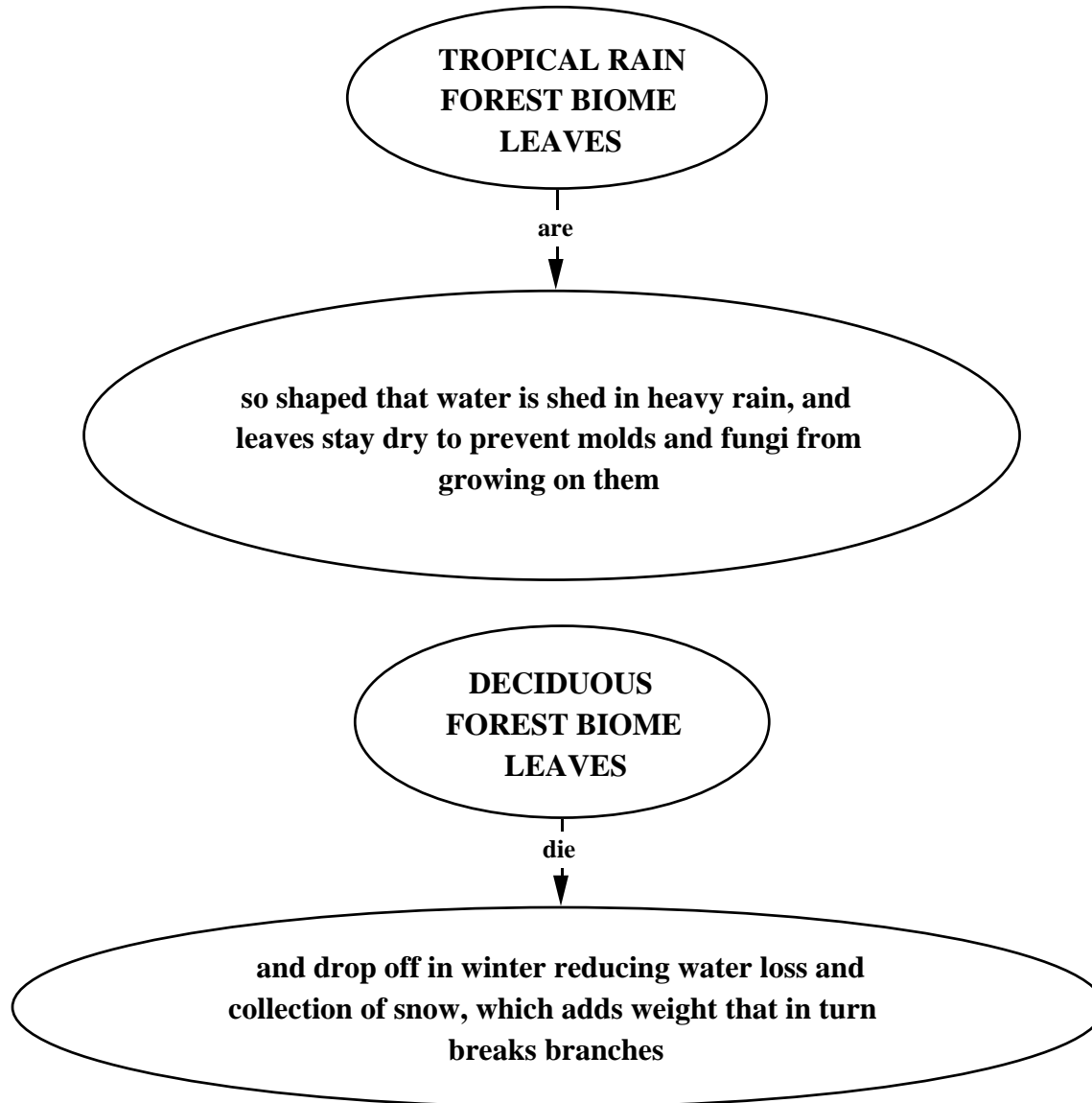
**The structure of trees that survive in the TROPICAL RAIN FOREST BIOMES
different from the structure of TREES that survive in the DECIDUOUS
FOREST BIOME.**

**Differences in the structure of roots, stems, and leaves allows TREES to
meet their basic needs in environments exhibiting very different
conditions.**

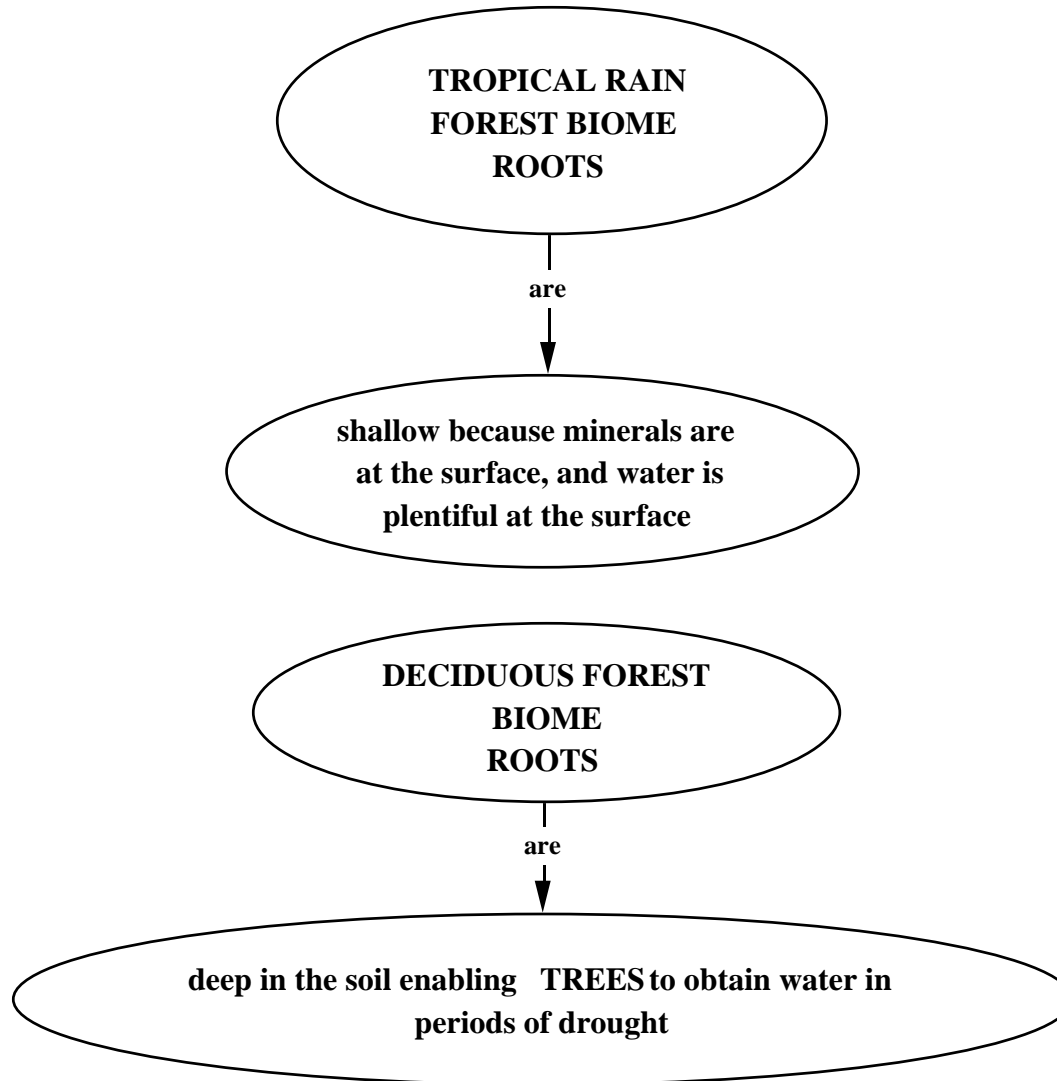
**TROPICAL RAIN FOREST AND DECIDUOUS FOREST BIOMES:
SOME DIFFERENCES IN ENVIRONMENTAL CONDITIONS**



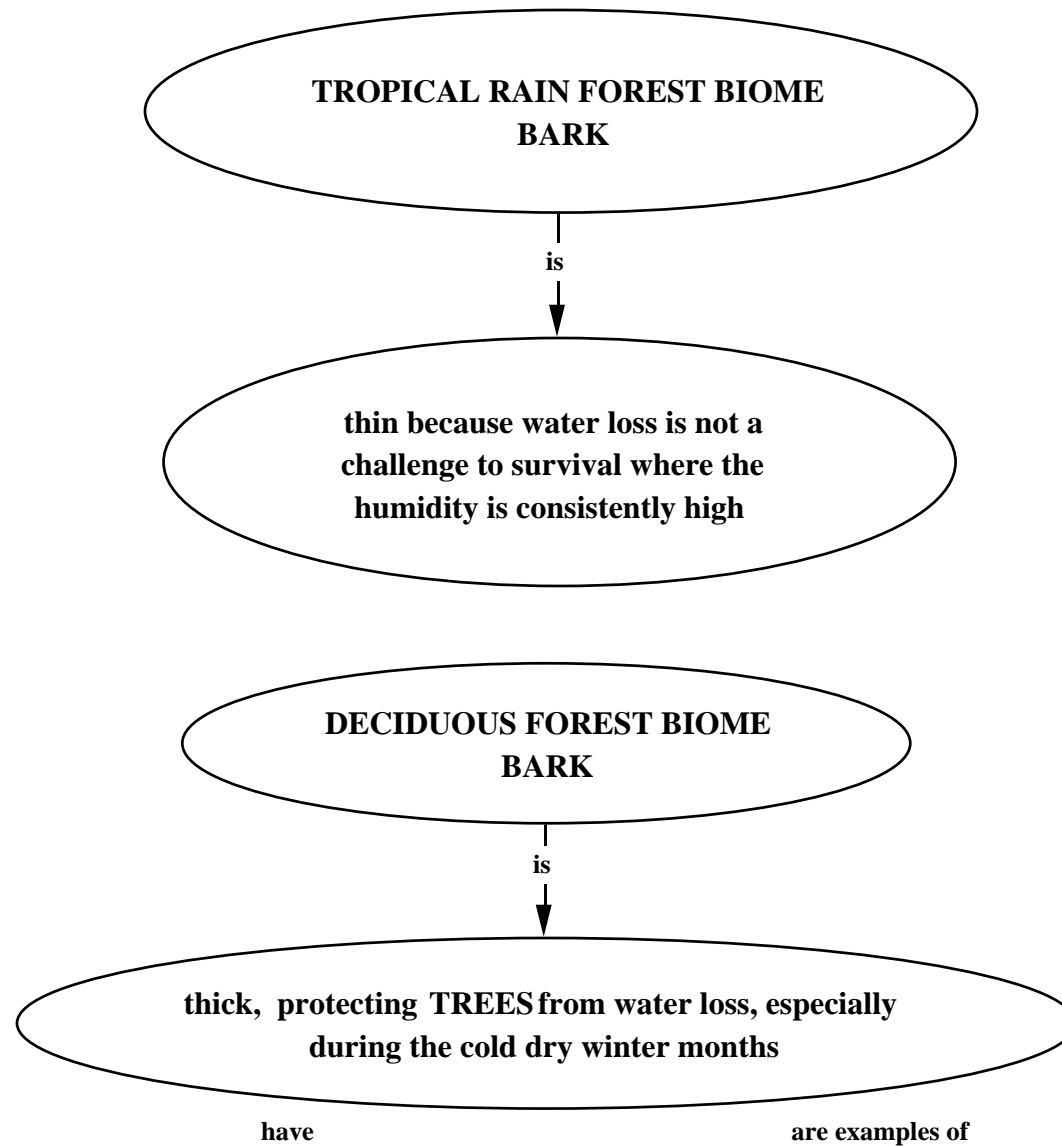
TREE STRUCTURES: LEAVES
TROPICAL RAIN FOREST AND DECIDUOUS FOREST BIOMES



TREE STRUCTURES: ROOTS
TROPICAL RAIN FOREST AND DECIDUOUS FOREST BIOMES



TREE STRUCTURES: BARK
TROPICAL RAIN FOREST AND DECIDUOUS FOREST BIOMES



have

are examples of

produce

produce

have

have

is accomplished by

is

is

is

is

synthesize

are raw materials for