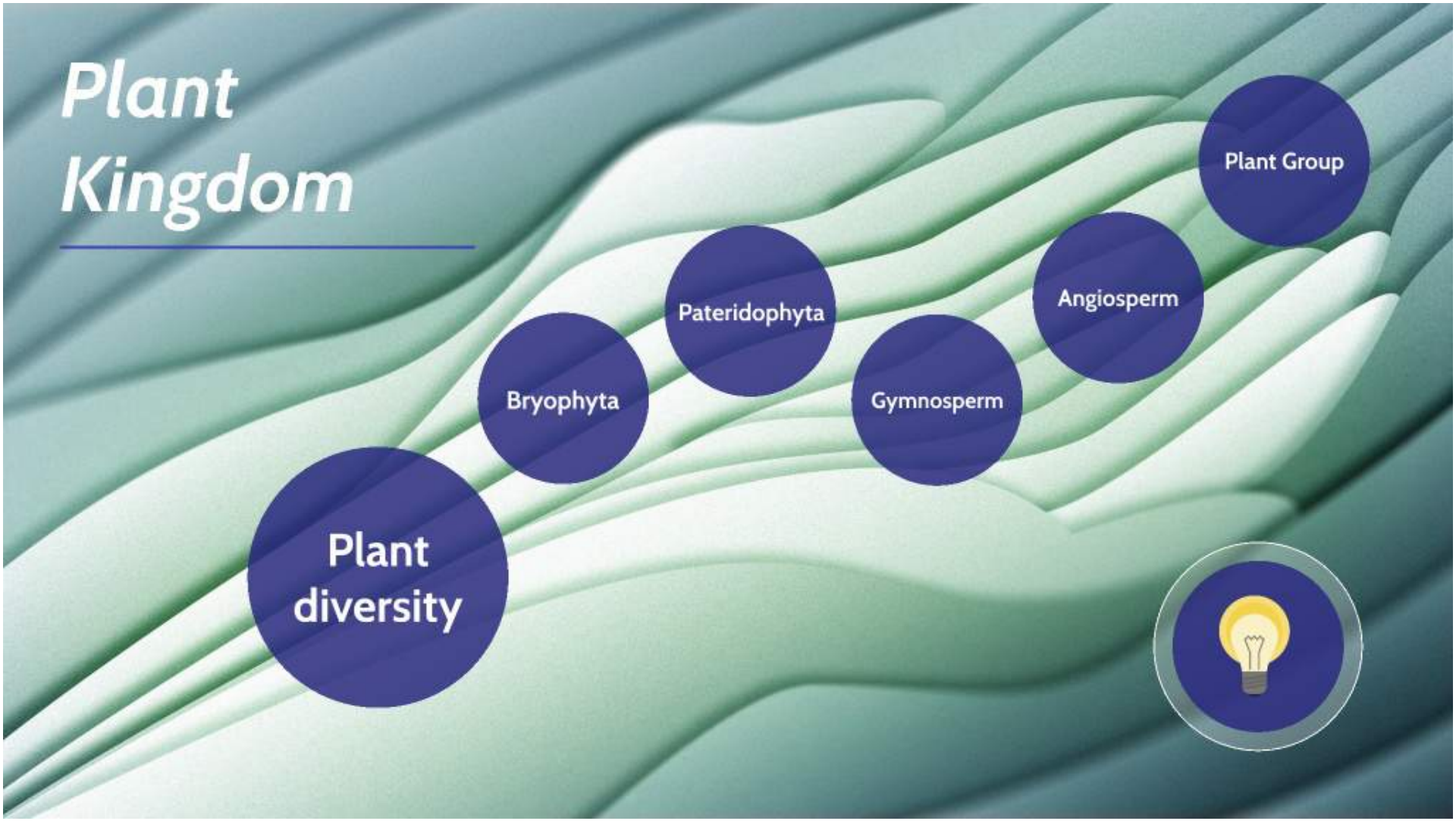
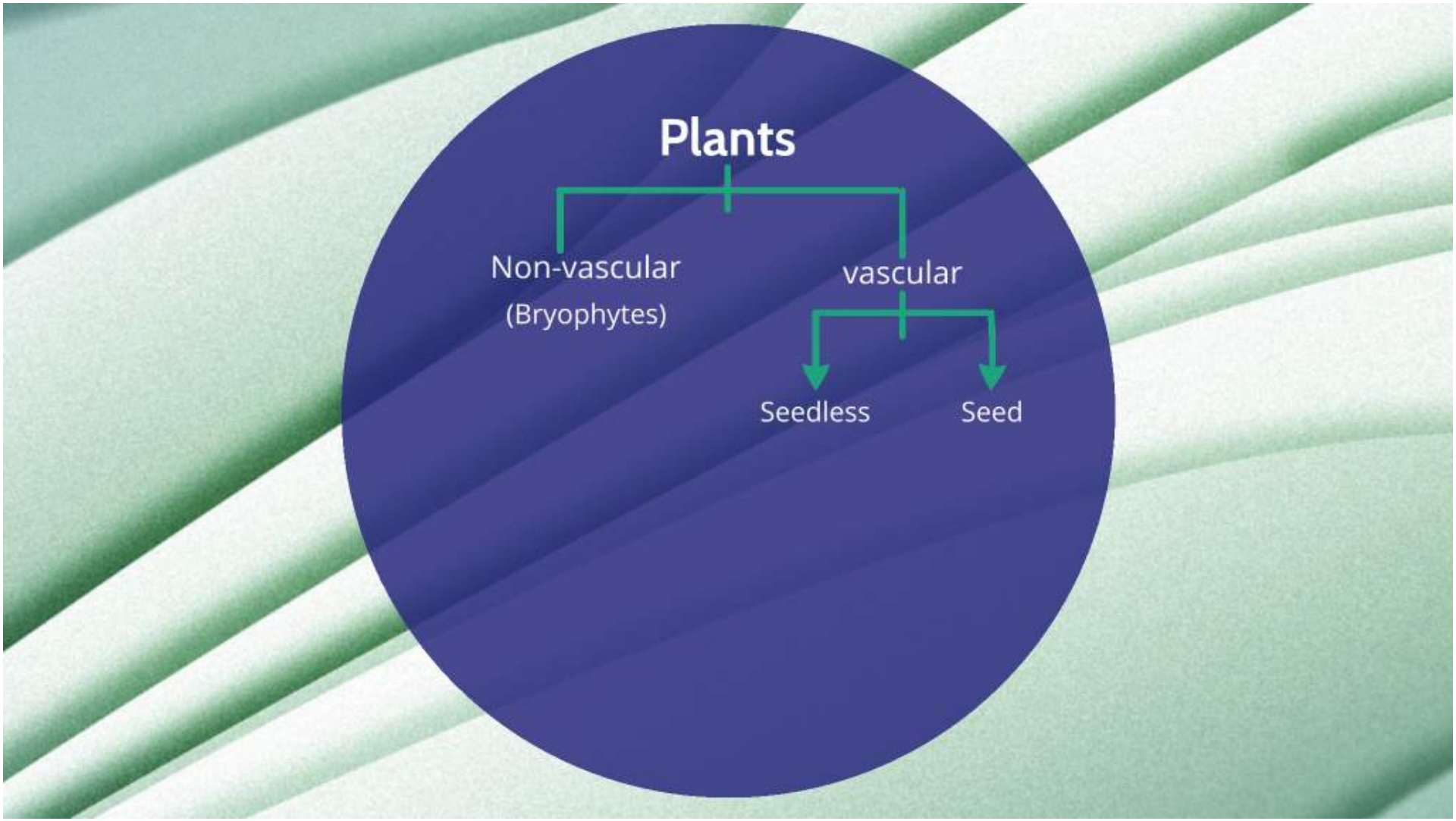
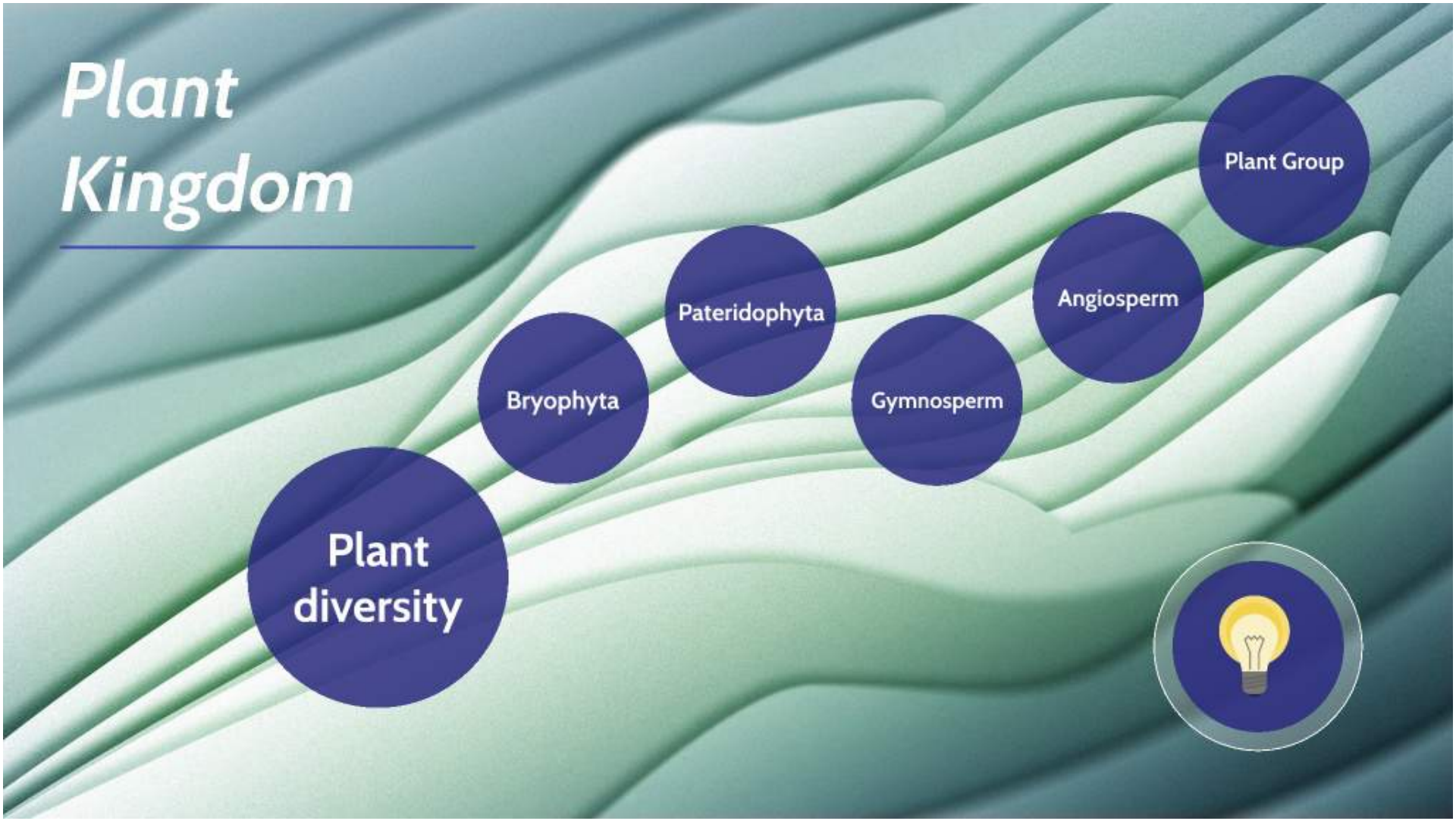
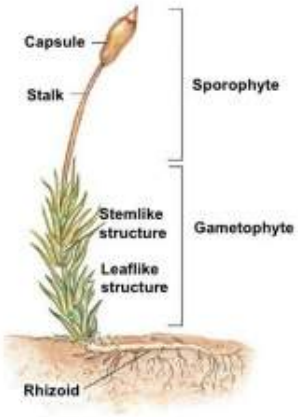

Plant Kingdom
Plant Group
Angiosperm
Gymnosperm
Pateridophyta
Bryophyta
Plant diversity


Plants
Non-vascular
(Bryophytes)
vascular
Seedless
Seed


Plant Kingdom
Plant diversity
Bryophyta
Pateridophyta
Gymnosperm
Angiosperm
Plant Group

Bryophyta(Mosses)
Non-vascular plant

- **The Structure of a Moss**



Genus: *Funaria*

Sporophyte

Gametophyte

Capsule

Plant specimen

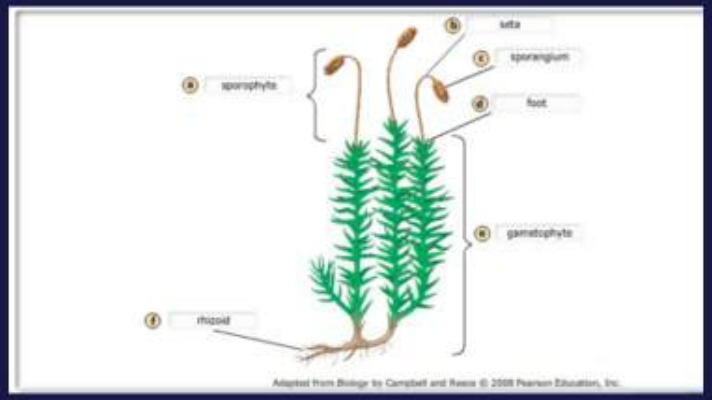
Sporophyte

The sporophyte consist of:

1-Foot (point of attachment)

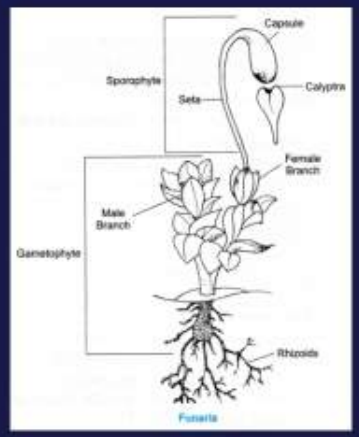
2-Seta (stalk)

3- Capsule (spore case)



Gametophyte

The gametophytice generation
is the dominant generation of the life cycle



Antheridium

Archegonium

Antheridium

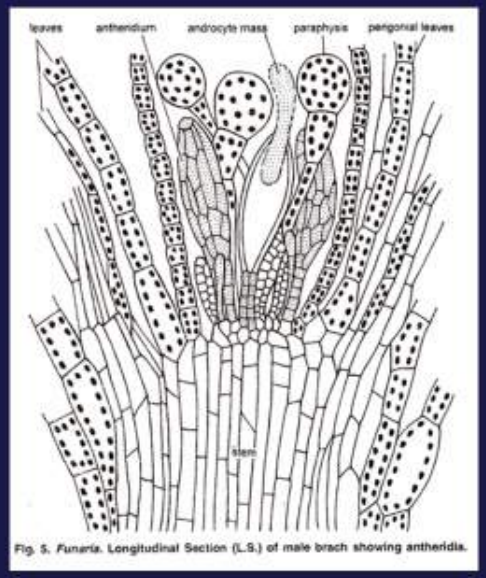
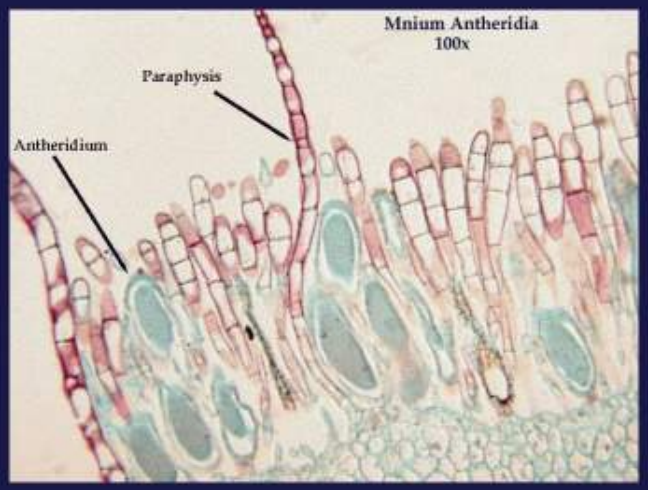


Fig. 5. *Funaria*. Longitudinal Section (L.S.) of male brach showing antheridia.

Under the microscope


Mnium Antheridia
100x
Paraphysis
Antheridium

Archegonium

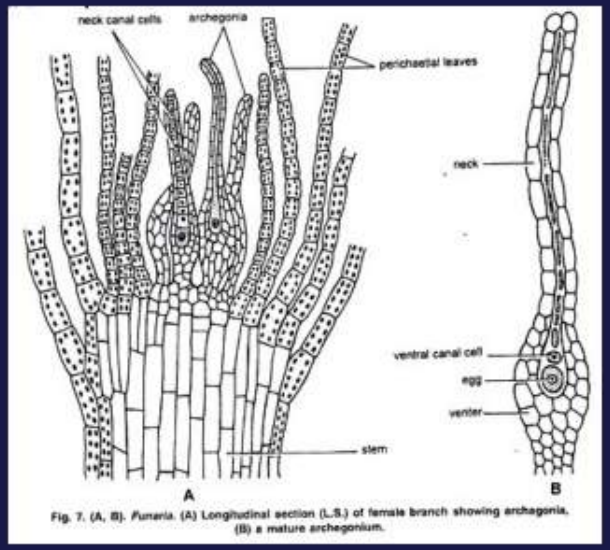
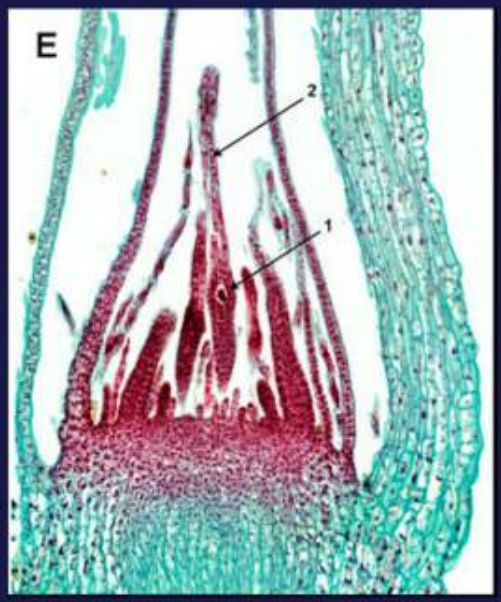
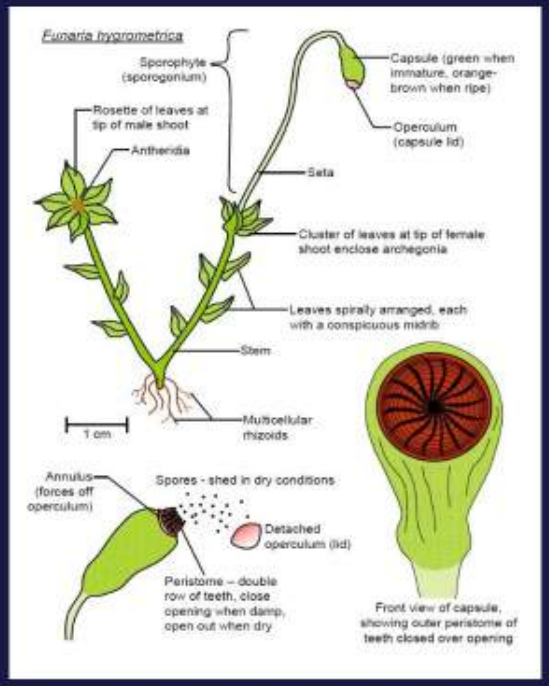


Fig. 7. (A, B). *Funaria*. (A) Longitudinal section (L.S.) of female branch showing archagonia. (B) a mature archegonium.

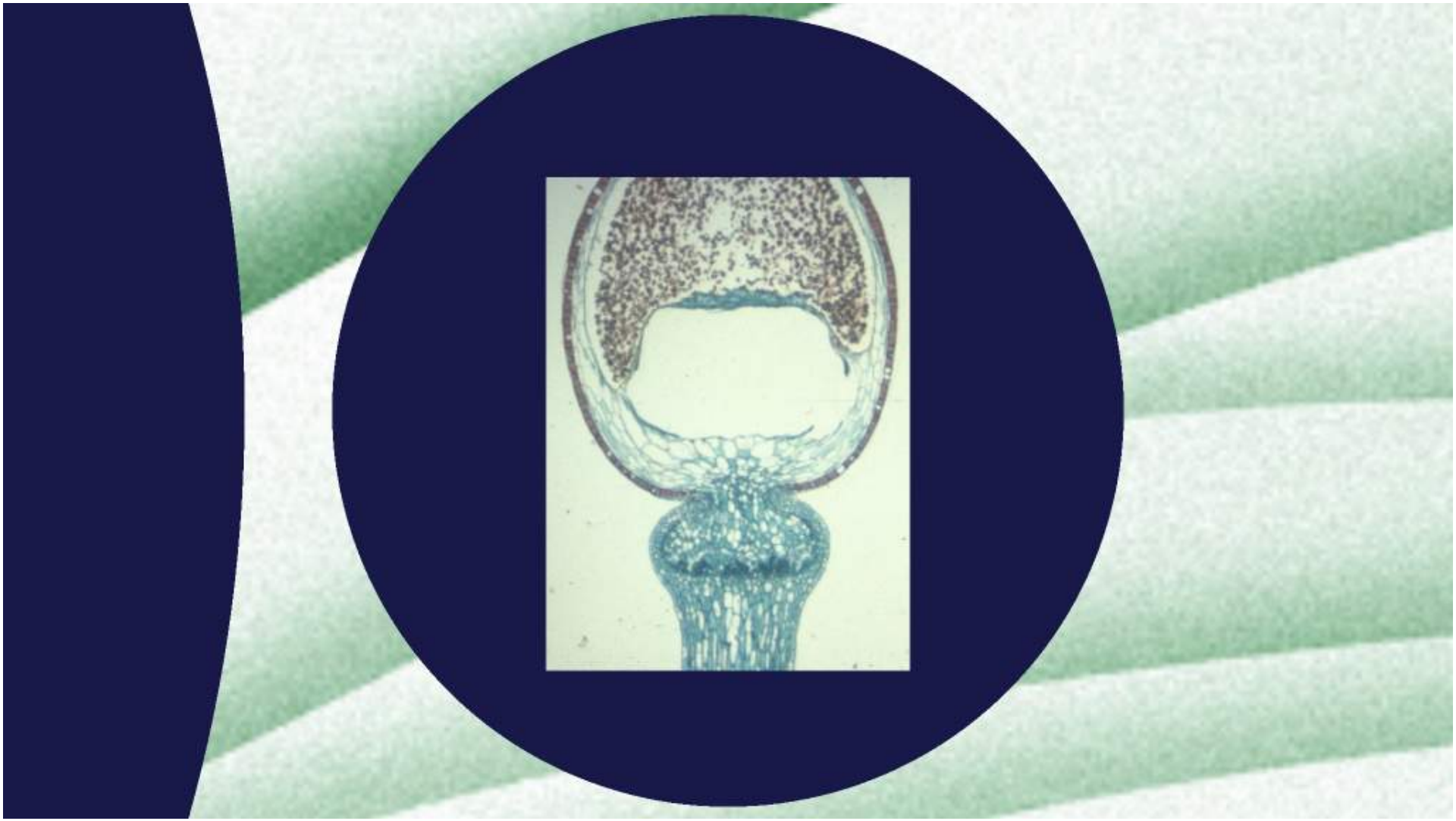
Under the microscope

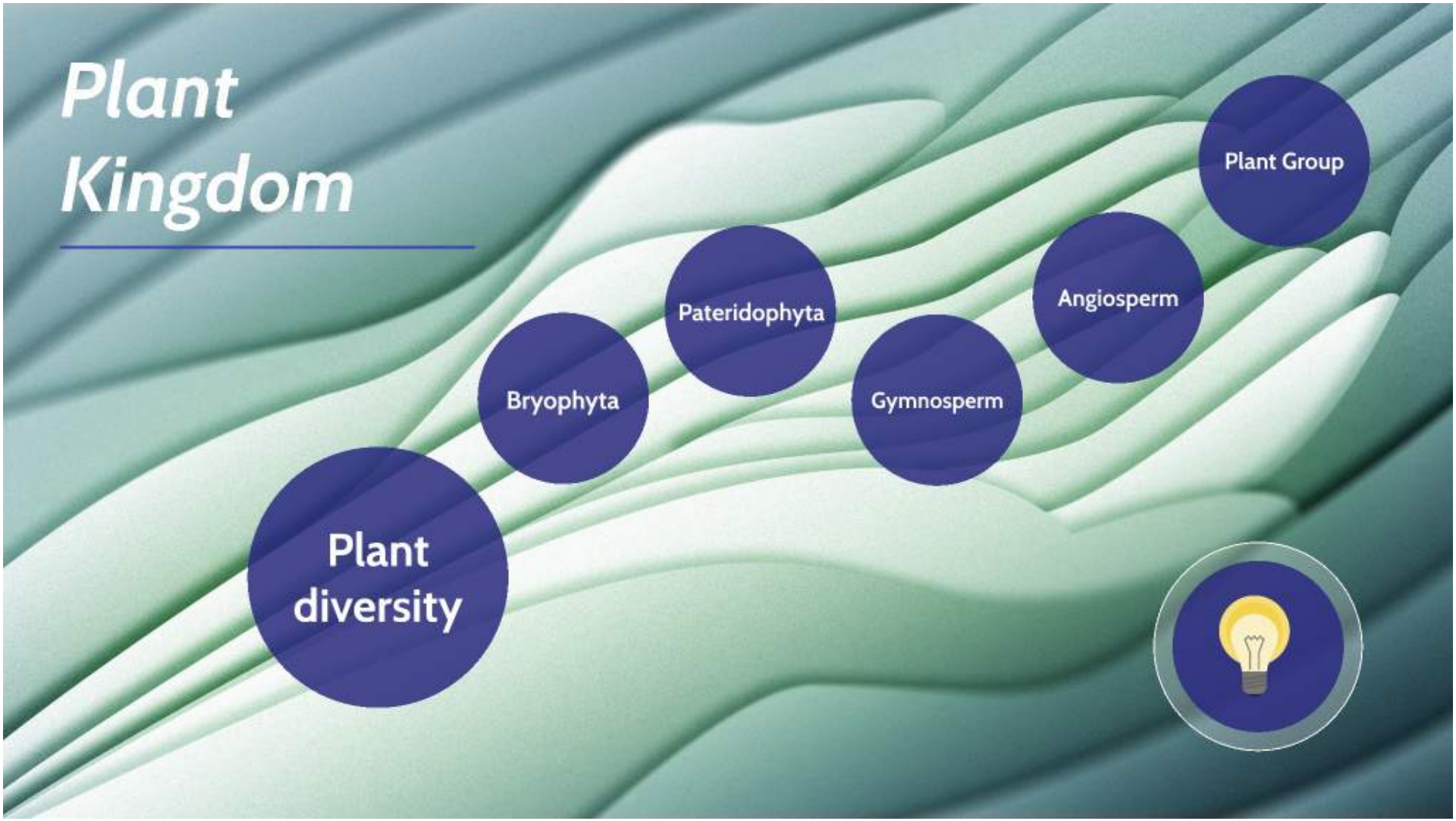

E
2
1

Capsule



Under the microscope




Plant Kingdom
Plant diversity
Bryophyta
Pateridophyta
Gymnosperm
Angiosperm
Plant Group

Pteridophyta(Ferns)
Seedless vascular plant

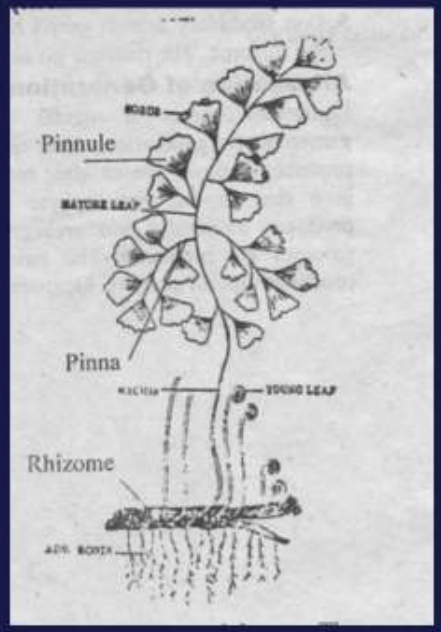
Genus:*Adiantum*

Sporophyte

Gametophyte

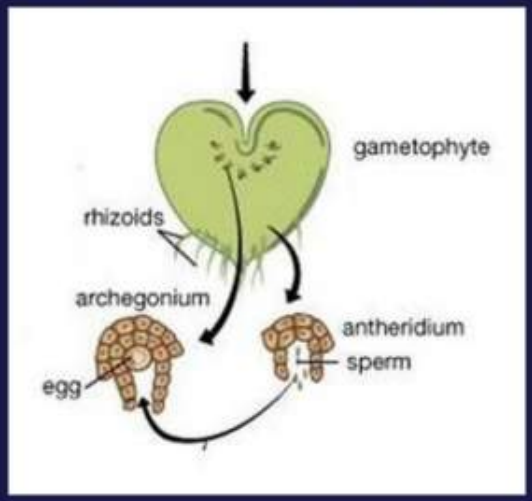
Sporophyte

The sporophytic generation
is the dominant generation of the life cycle

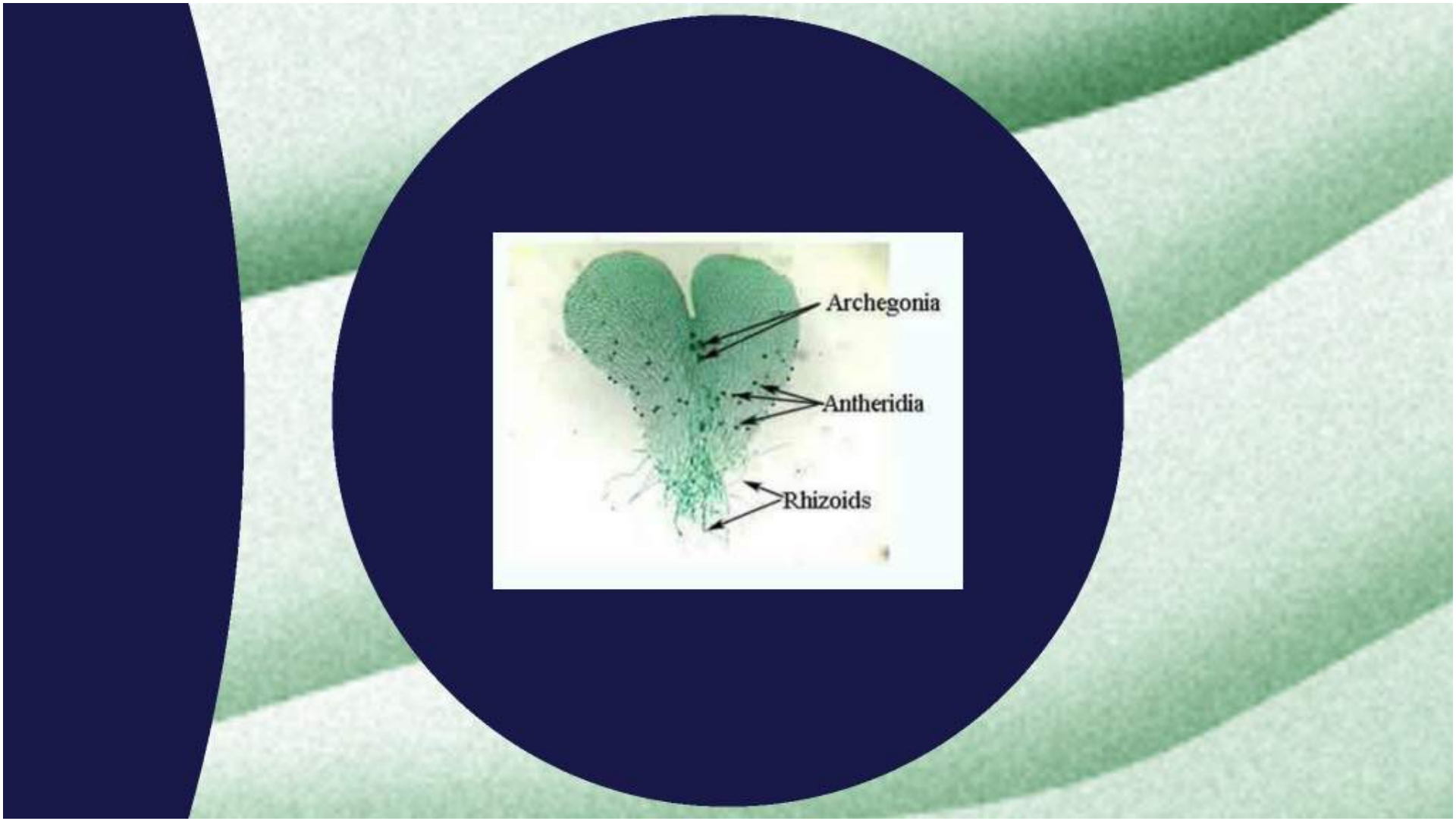


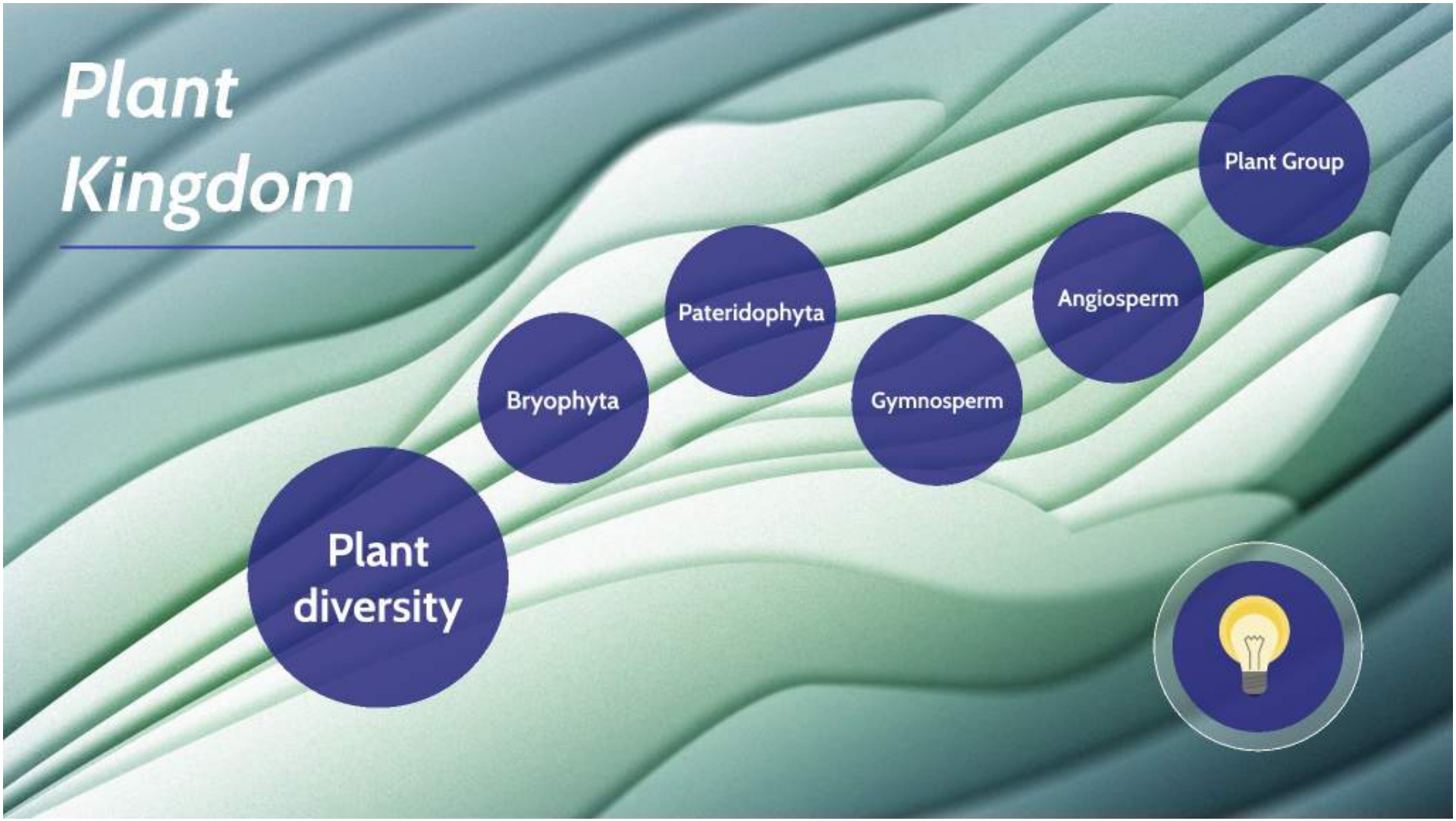
Gametophyte

Free-living independent (Photosynthesis)



Under the microscope

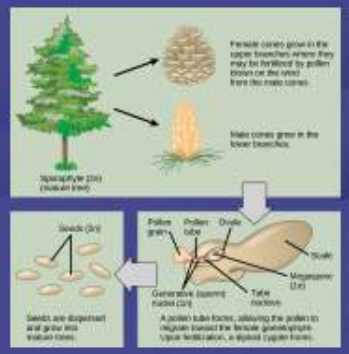

Archegonia
Antheridia
Rhizoids


Plant Kingdom
Plant Group
Angiosperm
Gymnosperm
Pateridophyta
Bryophyta
Plant diversity

Gymnosperm
Division:Pinophyta

vascular plant-seed plant(naked seed)

1-Sporophyte:
The sporophytic generation
is the dominant generation of the life cycle.
2-Gametophyte:
Microscopic gametes dependent on surrounding
sporophyte tissue for nutrition

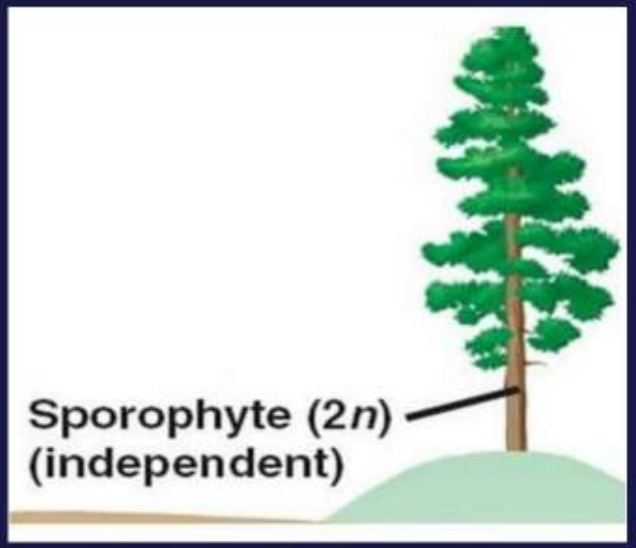


Sporophyte

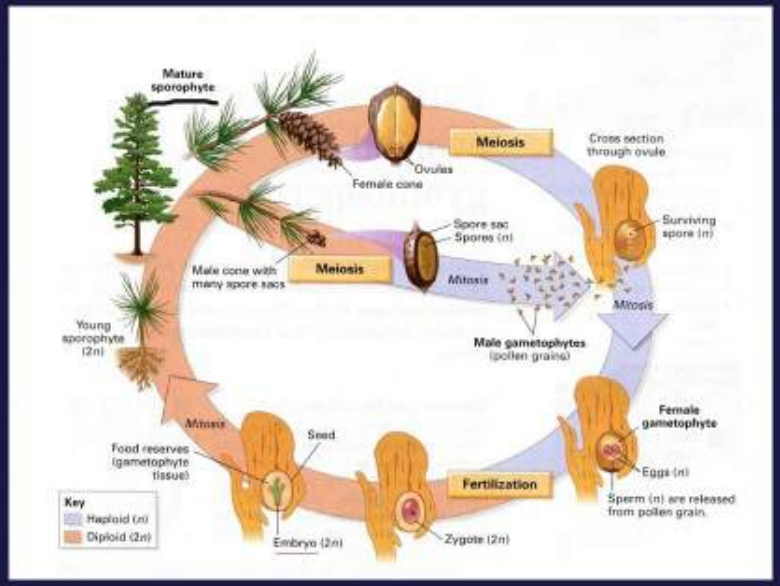
Gametophyte

Sporophyte

The sporophytic generation
is the dominant generation of the life cycle



Gametophyte

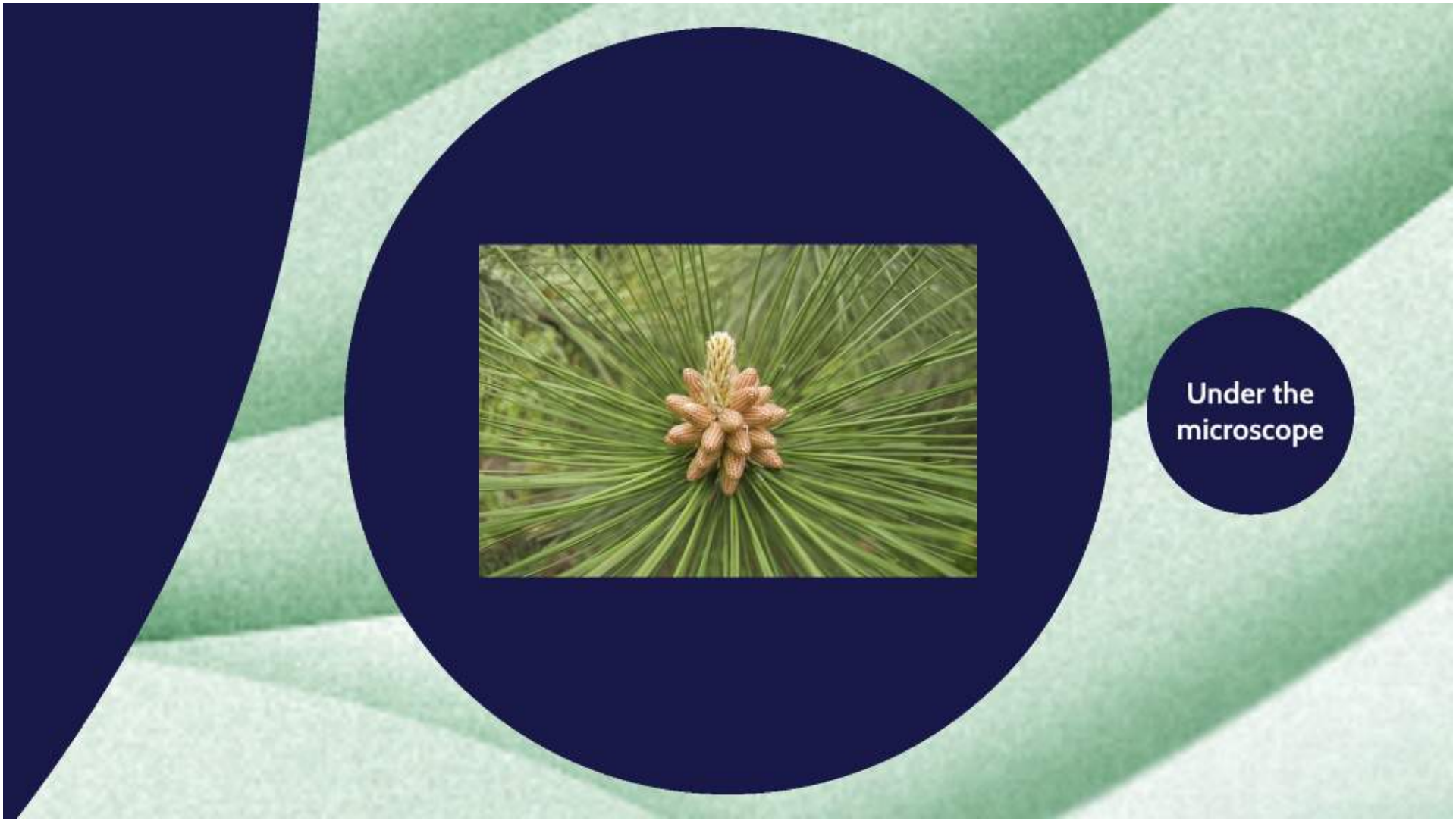


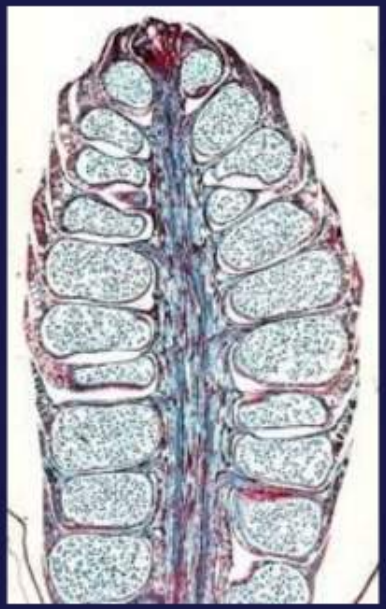
Female cone

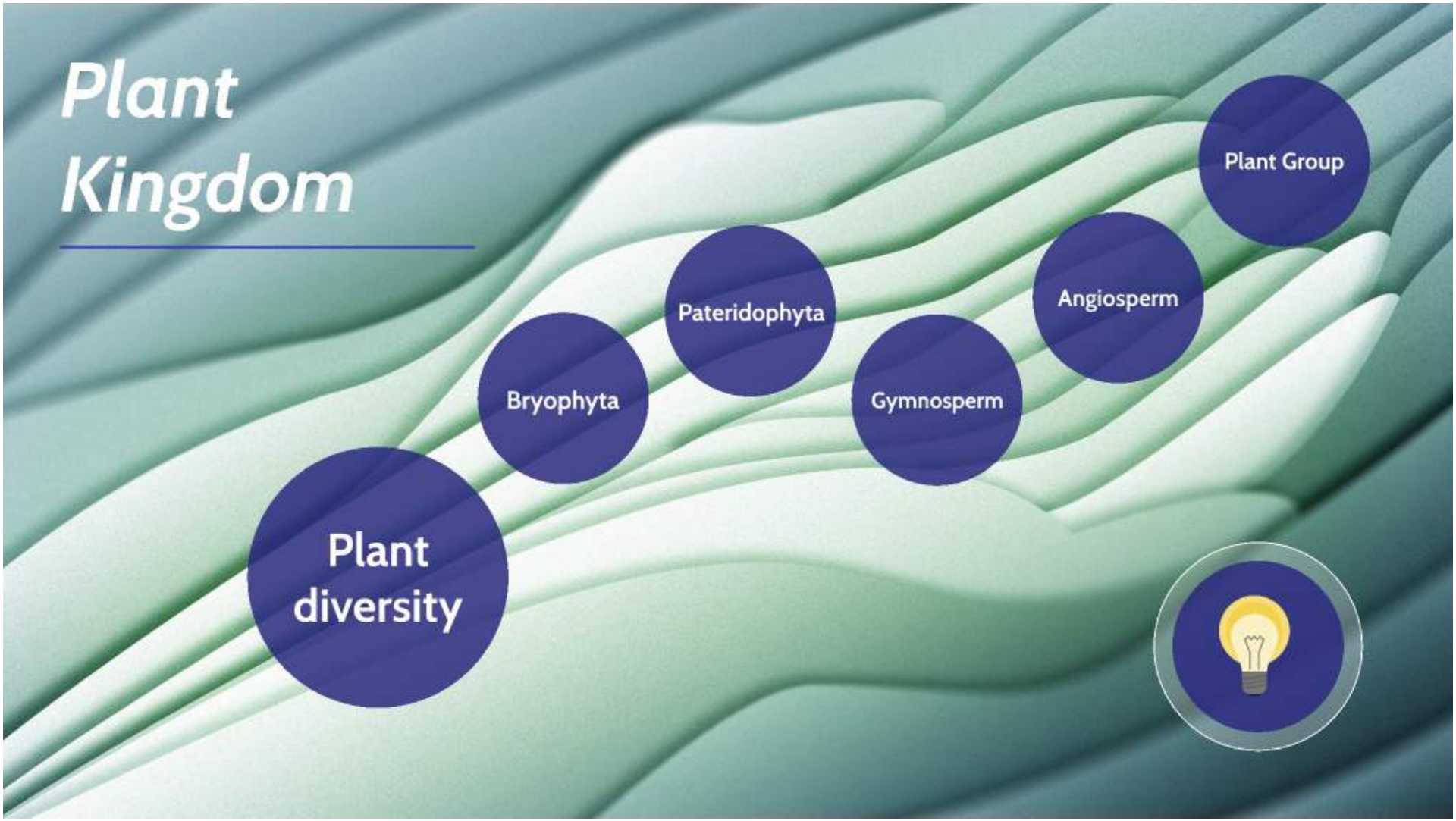
Male cone

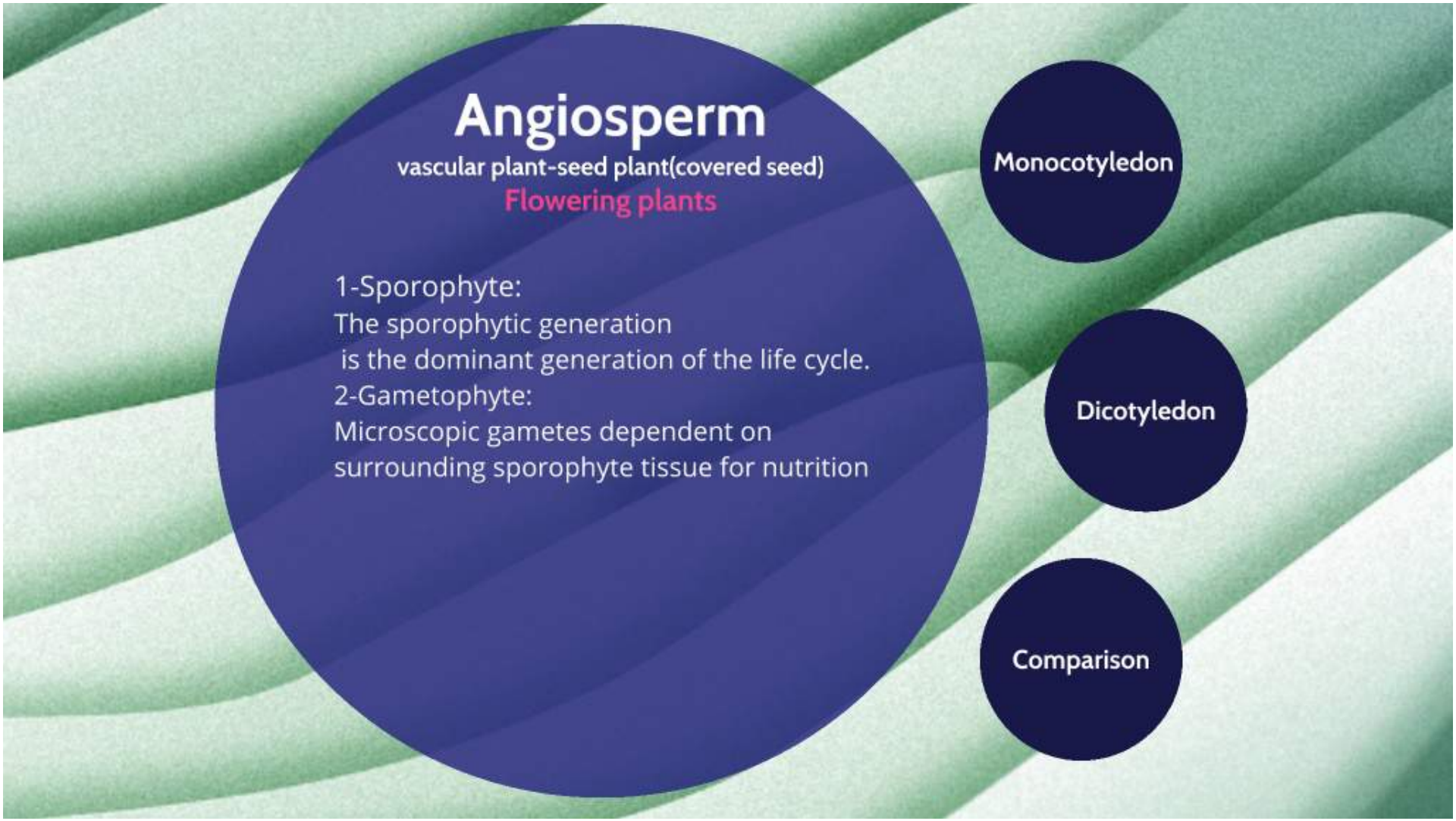
Female cone

Under the microscope

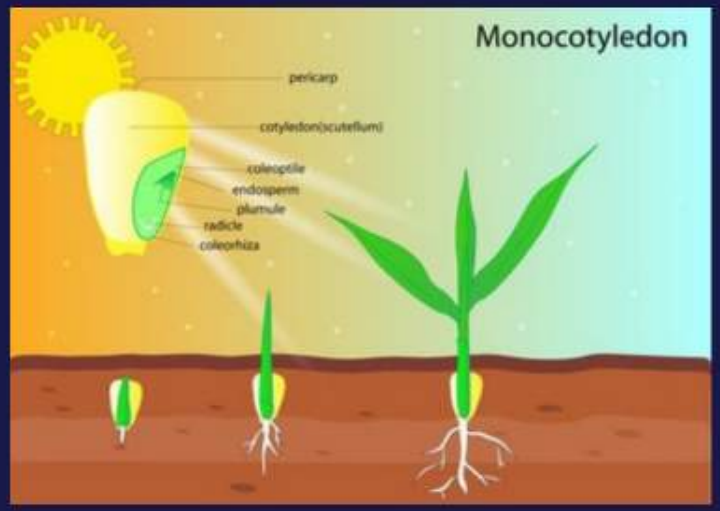

Under the
microscope




Plant Kingdom
Plant Group
Angiosperm
Gymnosperm
Pateridophyta
Bryophyta
Plant diversity


Angiosperm
vascular plant-seed plant(covered seed)
Flowering plants
1-Sporophyte:
The sporophytic generation
is the dominant generation of the life cycle.
2-Gametophyte:
Microscopic gametes dependent on
surrounding sporophyte tissue for nutrition
Monocotyledon
Dicotyledon
Comparison

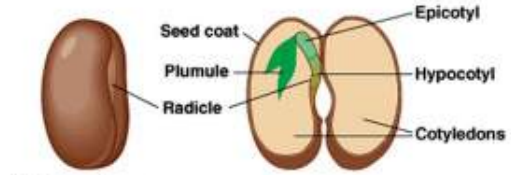
Monocotyledon



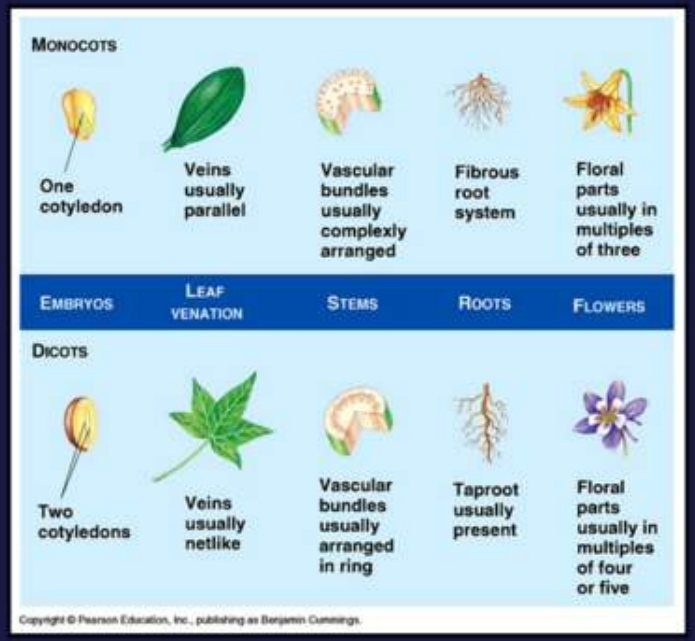
Dicotyledon

9.3.3 Dicot seed structure

The IB calls the seed coat a "testa"



(a) Common bean


Monocots
One cotyledon
Veins usually parallel
Vascular bundles usually complexly arranged
Fibrous root system
Floral parts usually in multiples of three
Embryos
Leaf venation
Stems
Roots
Flowers
Dicots
Two cotyledons
Veins usually netlike
Vascular bundles usually arranged in ring
Taproot usually present
Floral parts usually in multiples of four or five
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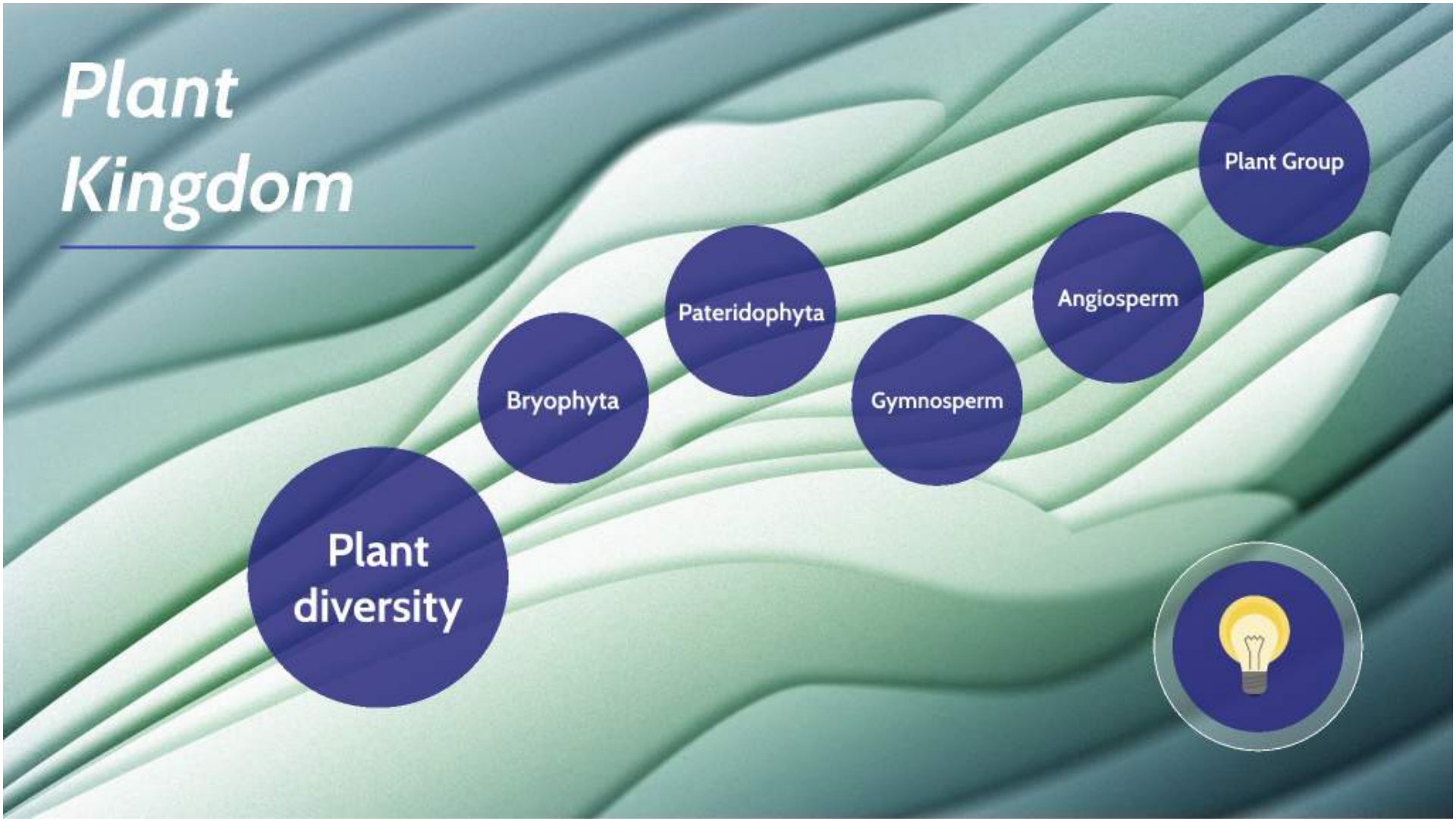
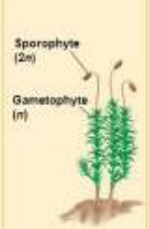
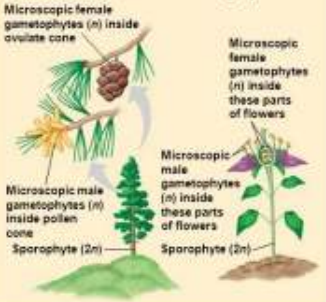
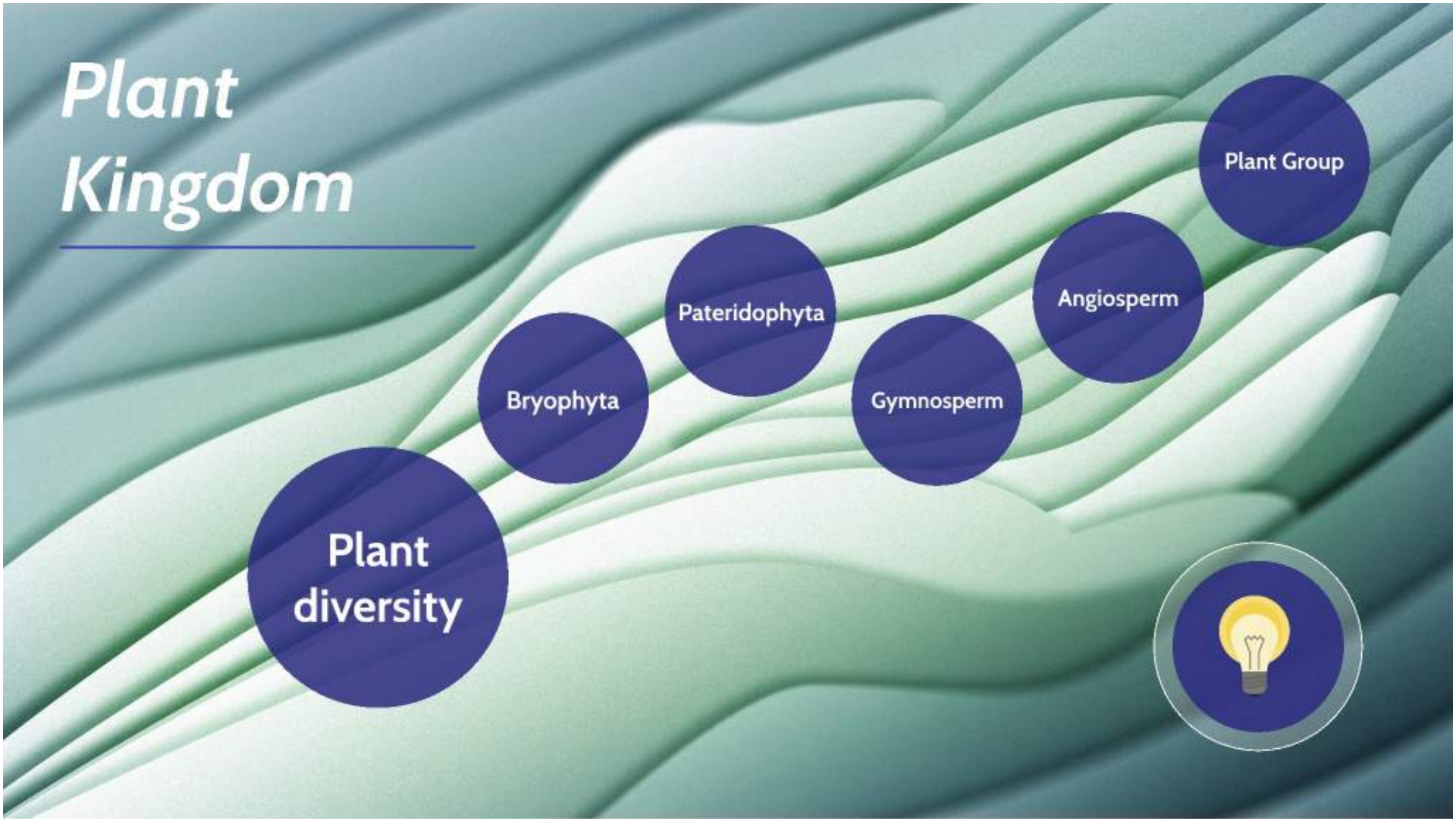
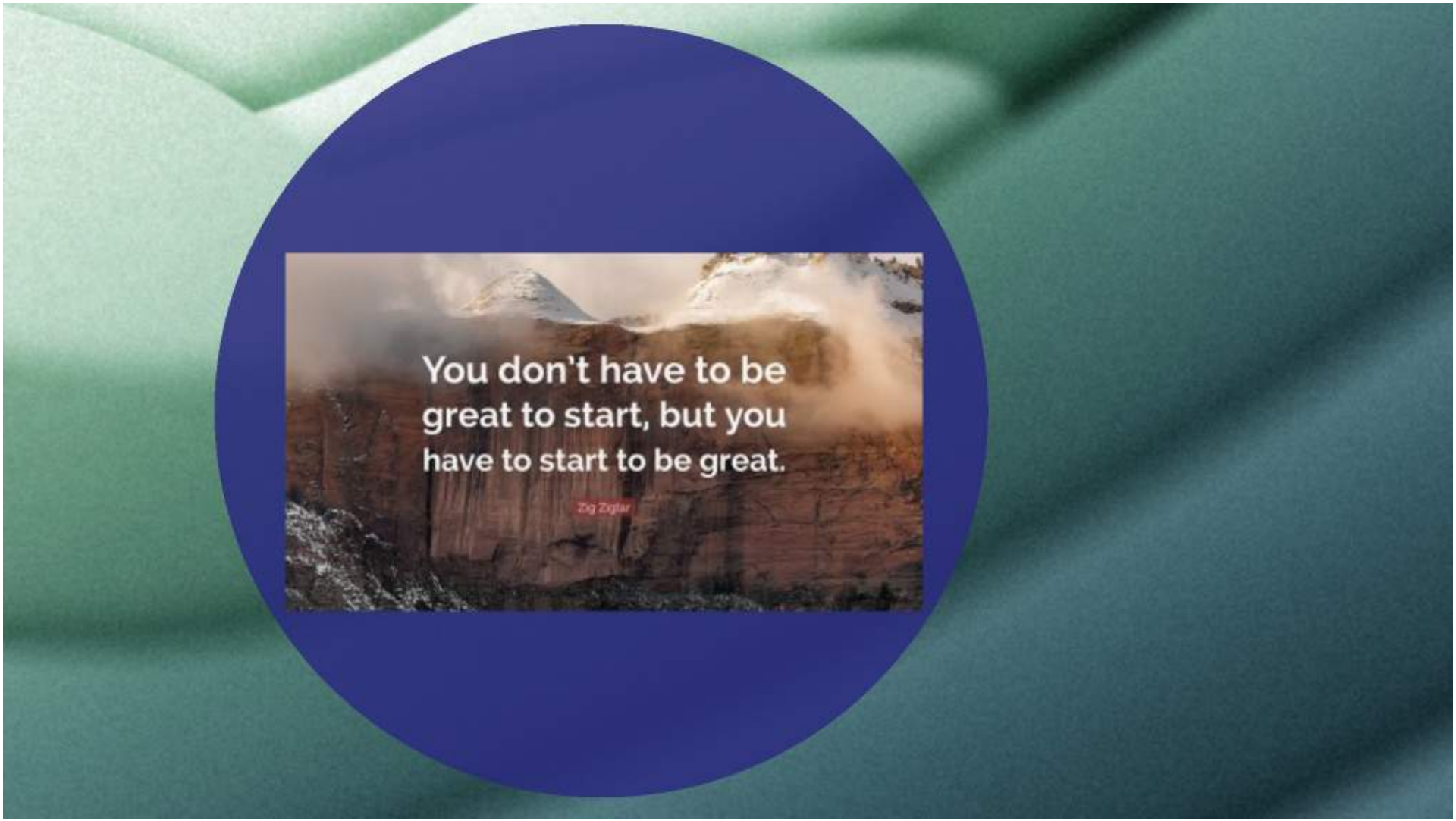
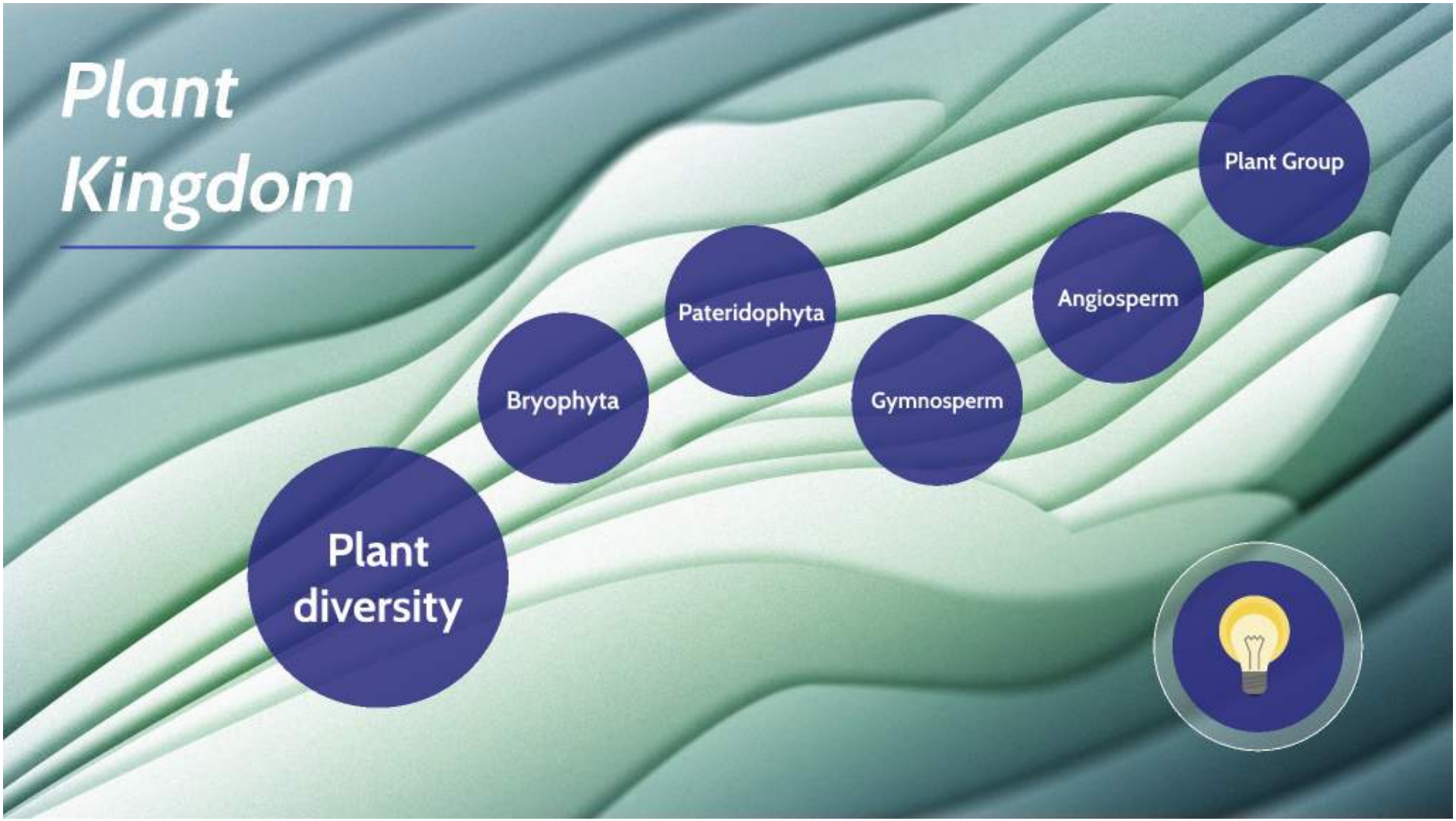

Plant Kingdom
Plant diversity
Bryophyta
Pateridophyta
Gymnosperm
Angiosperm
Plant Group

Figure 30.2

	PLANT GROUP		
	Mosses and other nonvascular plants	Ferns and other seedless vascular plants	Seed plants (gymnosperms and angiosperms)
Gametophyte	Dominant	Reduced, independent (photosynthetic and free-living)	Reduced (usually microscopic), dependent on surrounding sporophyte tissue for nutrition
Sporophyte	Reduced, dependent on gametophyte for nutrition	Dominant	Dominant
Example			Gymnosperm / Angiosperm 


Plant Kingdom
Plant diversity
Bryophyta
Pateridophyta
Gymnosperm
Angiosperm
Plant Group


You don't have to be
great to start, but you
have to start to be great.
Zig Ziglar


Plant Kingdom
Plant diversity
Bryophyta
Pateridophyta
Gymnosperm
Angiosperm
Plant Group