



Introduction to Ecosystems

Ecosystem

_____ :

Population

_____ :

_____ :

Community

_____ :

_____ :

Habitat

_____ _____ :

e.g.

Niche

Rock Pool

→
Playing Field

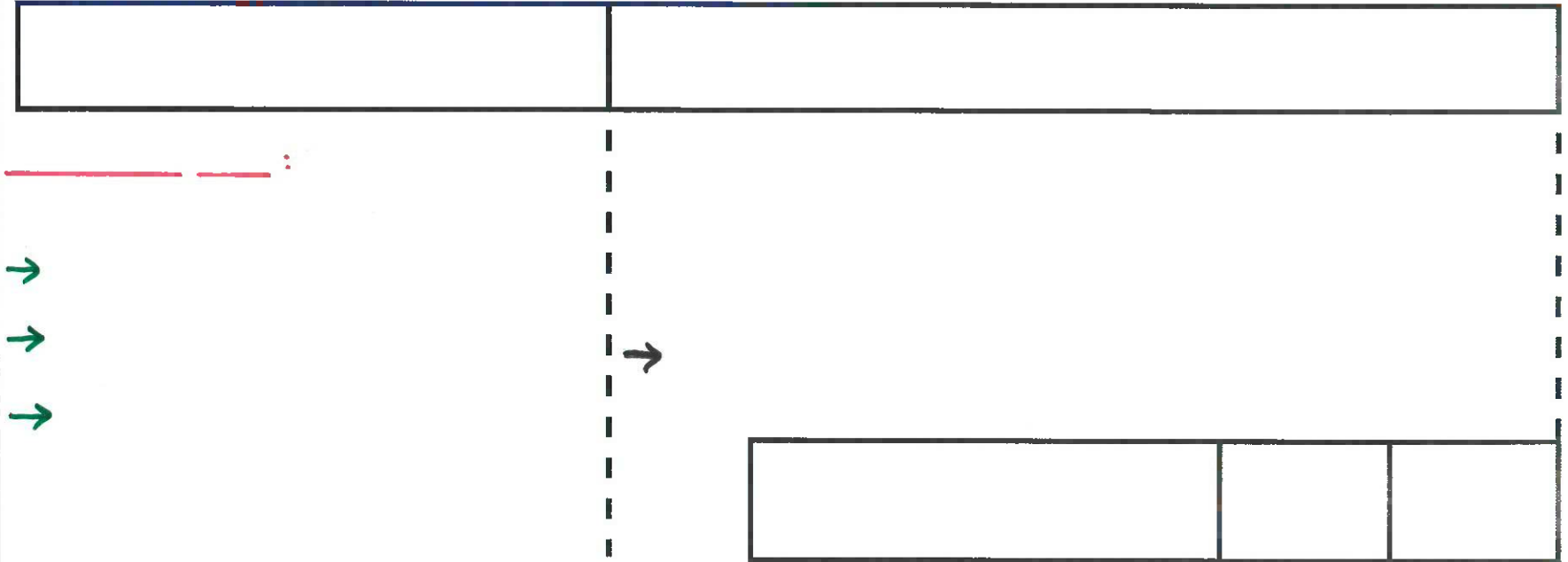
→
Large Tree

Tropic Level



Respiratory loss

Productivity



Calculating Energy Transfer Efficiency

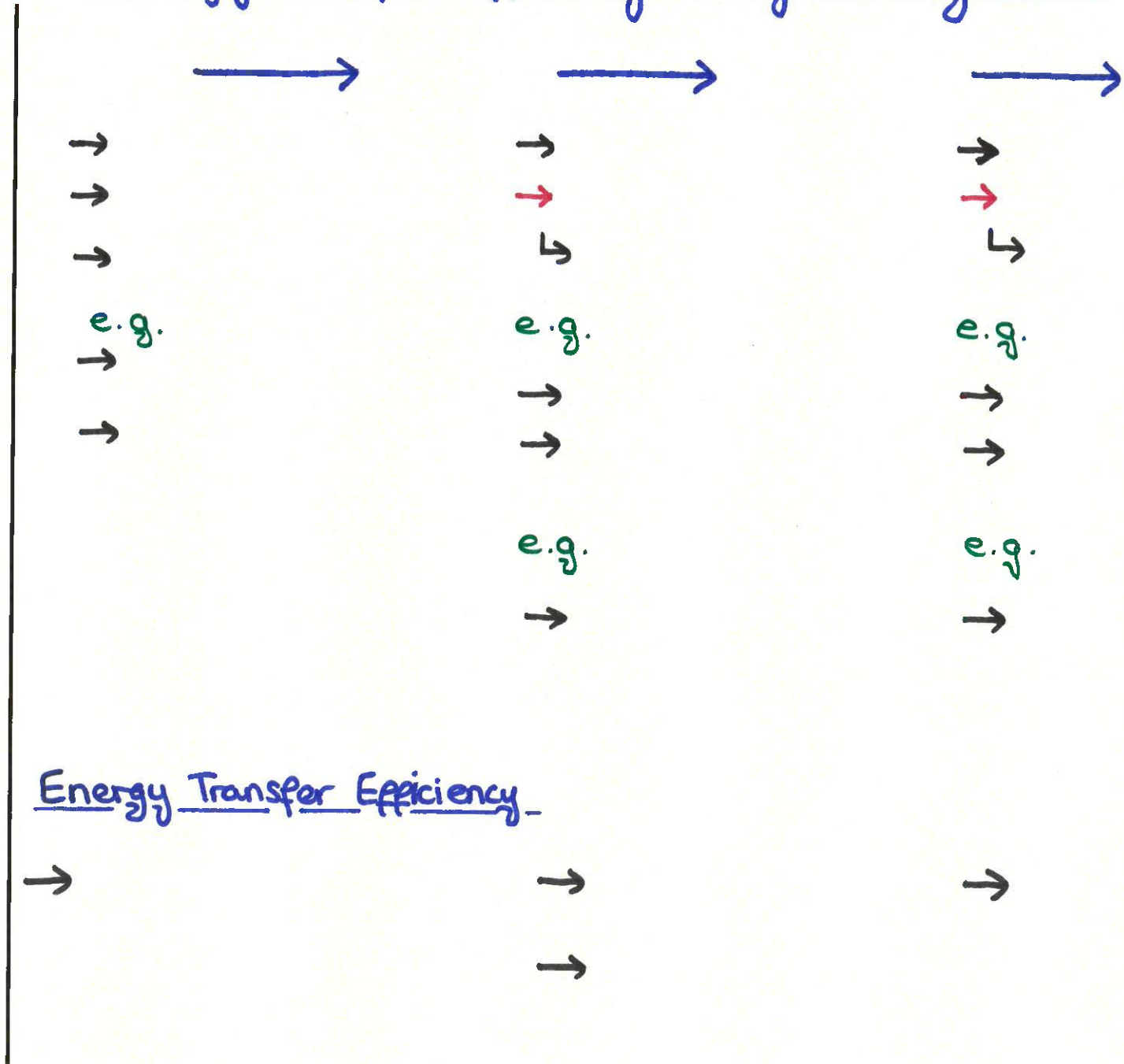
$$T =$$

$$Z =$$



Energy Transfer Efficiency Through Ecosystems

- 1
- 2
- 3
- 4
- 5





Increasing Energy Transfer Efficiency

Plant Crops

①



②

Animals / Livestock

③



④

⑤

⑥

⑦

Both Plants + Animals:



Calorimetry

Measuring Biomass

① Dry Biomass

-
-
-
-
-
-

② Mass of Carbon

-
-
-
-
-

Calculating Energy Stored in Biomass

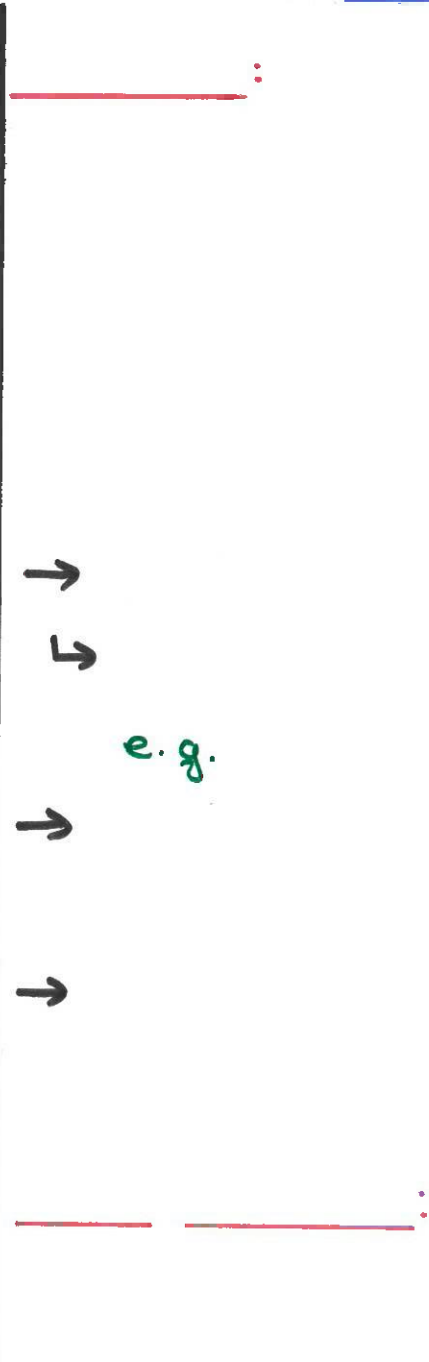
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Succession

- 1
- 2
- 3
- 4
- 5

Succession



Climax
Community

e.g.

As Succession takes place

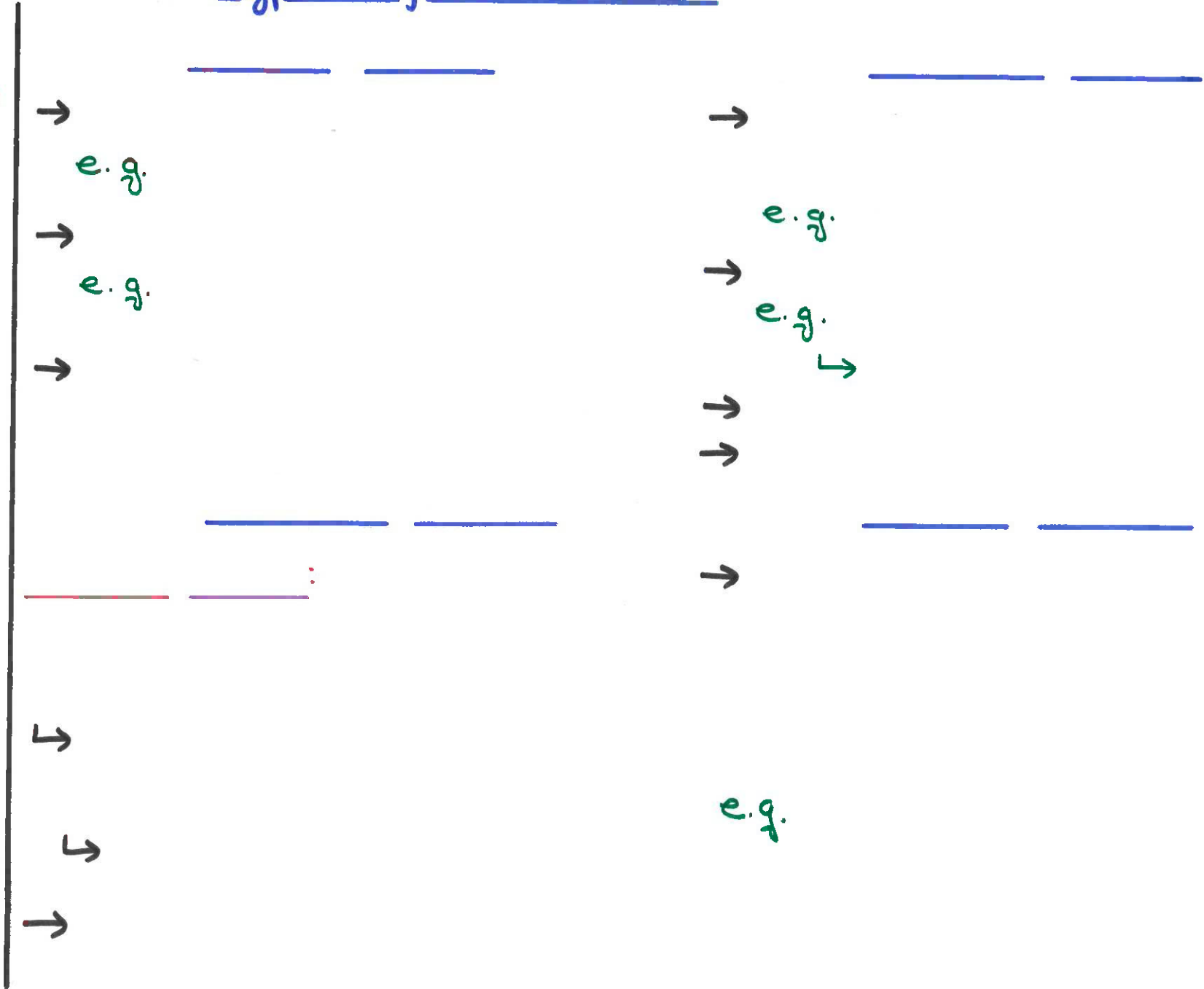




Types of Succession

1 2 3 4 5

Deflected Succession

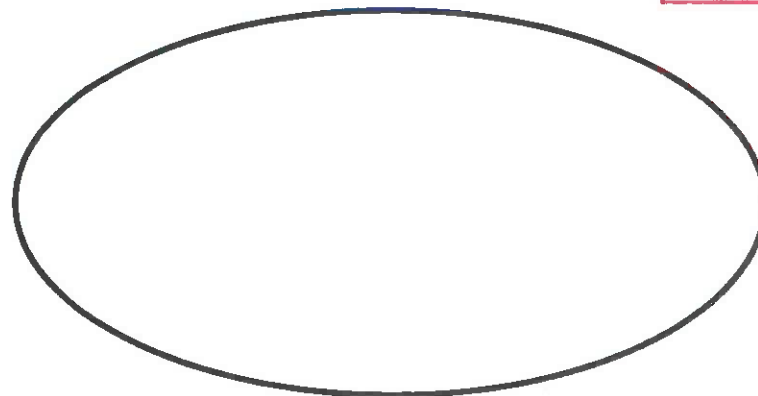
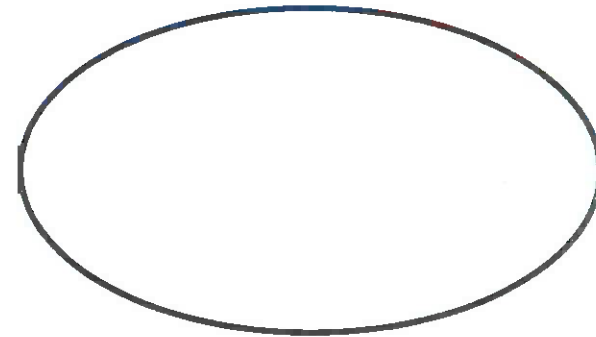
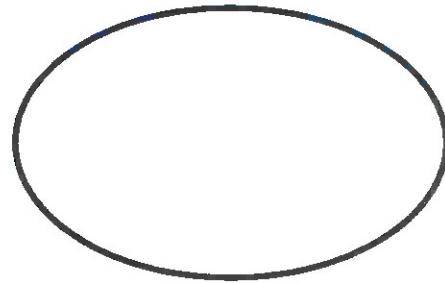
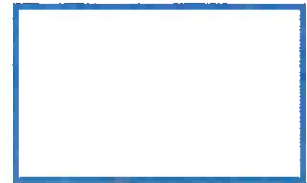




Saprobiontic
Nutrition

The Nitrogen Cycle

1 2 3 4 5





The Carbon Cycle

- 1
- 2
- 3
- 4
- 5

