

Biology Learning Journey

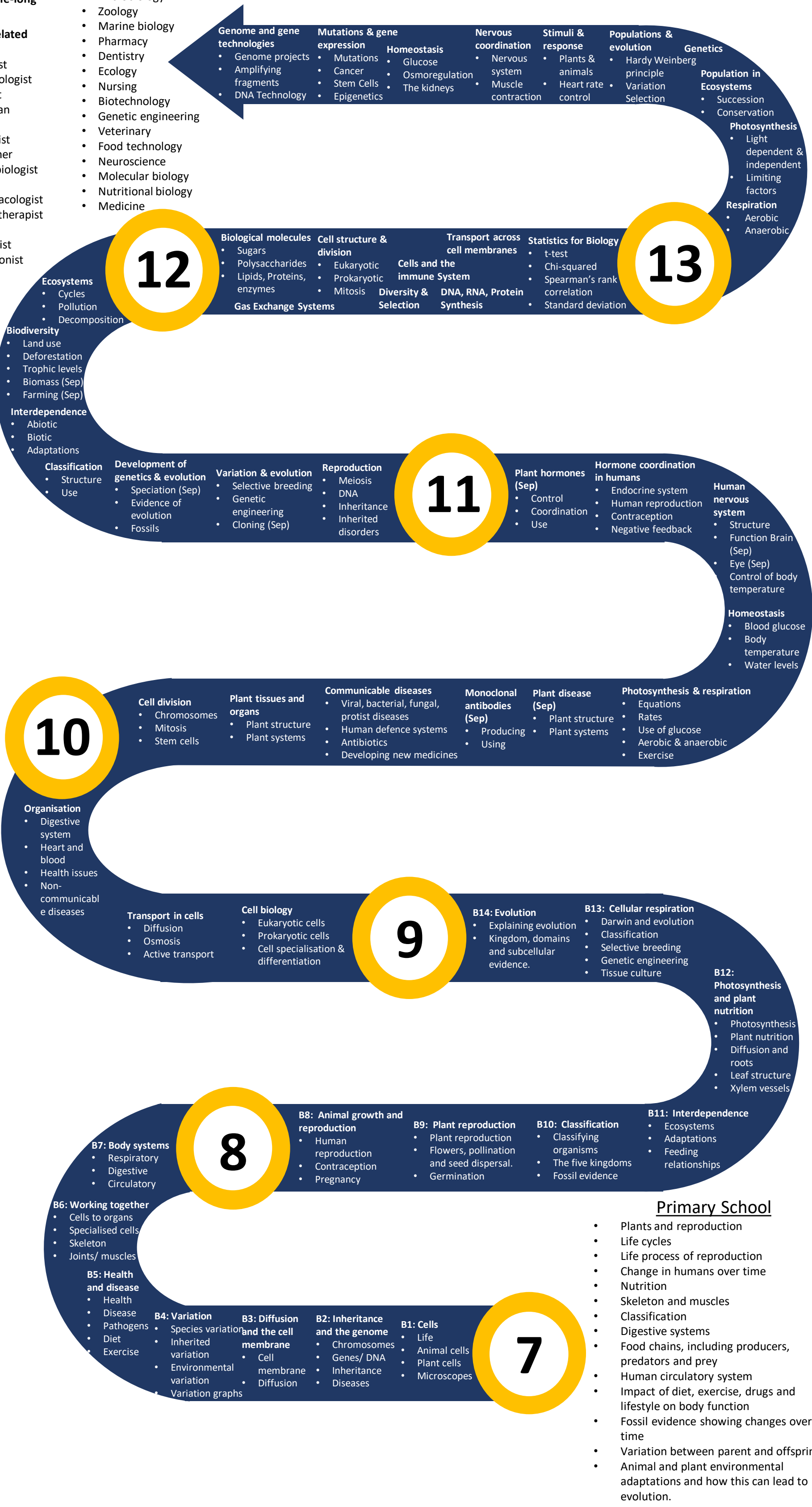
Or just continue to develop an interest in biology and develop life-long learning.

Biology related careers...

- Botanist
- Criminologist
- Dentist
- Dietician
- Doctor
- Ecologist
- Gardener
- Microbiologist
- Nurse
- Pharmacologist
- Physiotherapist
- Vet
- Zoologist
- Nutritionist

Continuing to study a biology related course...

- Biomedical science
- Microbiology
- Zoology
- Marine biology
- Pharmacy
- Dentistry
- Ecology
- Nursing
- Biotechnology
- Genetic engineering
- Veterinary
- Food technology
- Neuroscience
- Molecular biology
- Nutritional biology
- Medicine



10

- Organisation**
- Digestive system
 - Heart and blood
 - Health issues
 - Non-communicable diseases

- Cell division**
 - Chromosomes
 - Mitosis
 - Stem cells
- Plant tissues and organs**
 - Plant structure
 - Plant systems
- Communicable diseases**
 - Viral, bacterial, fungal, protist diseases
 - Human defence systems
 - Antibiotics
 - Developing new medicines
- Monoclonal antibodies (Sep)**
 - Producing
 - Using
- Plant disease (Sep)**
 - Plant structure
 - Plant systems
- Photosynthesis & respiration**
 - Equations
 - Rates
 - Use of glucose
 - Aerobic & anaerobic
 - Exercise

9

- Transport in cells**
- Diffusion
 - Osmosis
 - Active transport

- Cell biology**
- Eukaryotic cells
 - Prokaryotic cells
 - Cell specialisation & differentiation

- B14: Evolution**
- Explaining evolution
 - Kingdom, domains and subcellular evidence.

- B13: Cellular respiration**
- Darwin and evolution
 - Classification
 - Selective breeding
 - Genetic engineering
 - Tissue culture

- B12: Photosynthesis and plant nutrition**
- Photosynthesis
 - Plant nutrition
 - Diffusion and roots
 - Leaf structure
 - Xylem vessels

8

- B7: Body systems**
- Respiratory
 - Digestive
 - Circulatory

- B6: Working together**
- Cells to organs
 - Specialised cells
 - Skeleton
 - Joints/ muscles

- B5: Health and disease**
- Health
 - Disease
 - Pathogens
 - Diet
 - Exercise

- B4: Variation**
- Species variation
 - Inherited variation
 - Environmental variation
 - Variation graphs

- B3: Diffusion and the cell membrane**
- Cell membrane
 - Diffusion

- B2: Inheritance and the genome**
- Chromosomes
 - Genes/ DNA
 - Inheritance
 - Diseases

- B1: Cells**
- Life
 - Animal cells
 - Plant cells
 - Microscopes

- B8: Animal growth and reproduction**
- Human reproduction
 - Contraception
 - Pregnancy

- B9: Plant reproduction**
- Plant reproduction
 - Flowers, pollination and seed dispersal.
 - Germination

- B10: Classification**
- Classifying organisms
 - The five kingdoms
 - Fossil evidence

- B11: Interdependence**
- Ecosystems
 - Adaptations
 - Feeding relationships

7

Primary School

- Plants and reproduction
- Life cycles
- Life process of reproduction
- Change in humans over time
- Nutrition
- Skeleton and muscles
- Classification
- Digestive systems
- Food chains, including producers, predators and prey
- Human circulatory system
- Impact of diet, exercise, drugs and lifestyle on body function
- Fossil evidence showing changes over time
- Variation between parent and offspring
- Animal and plant environmental adaptations and how this can lead to evolution.