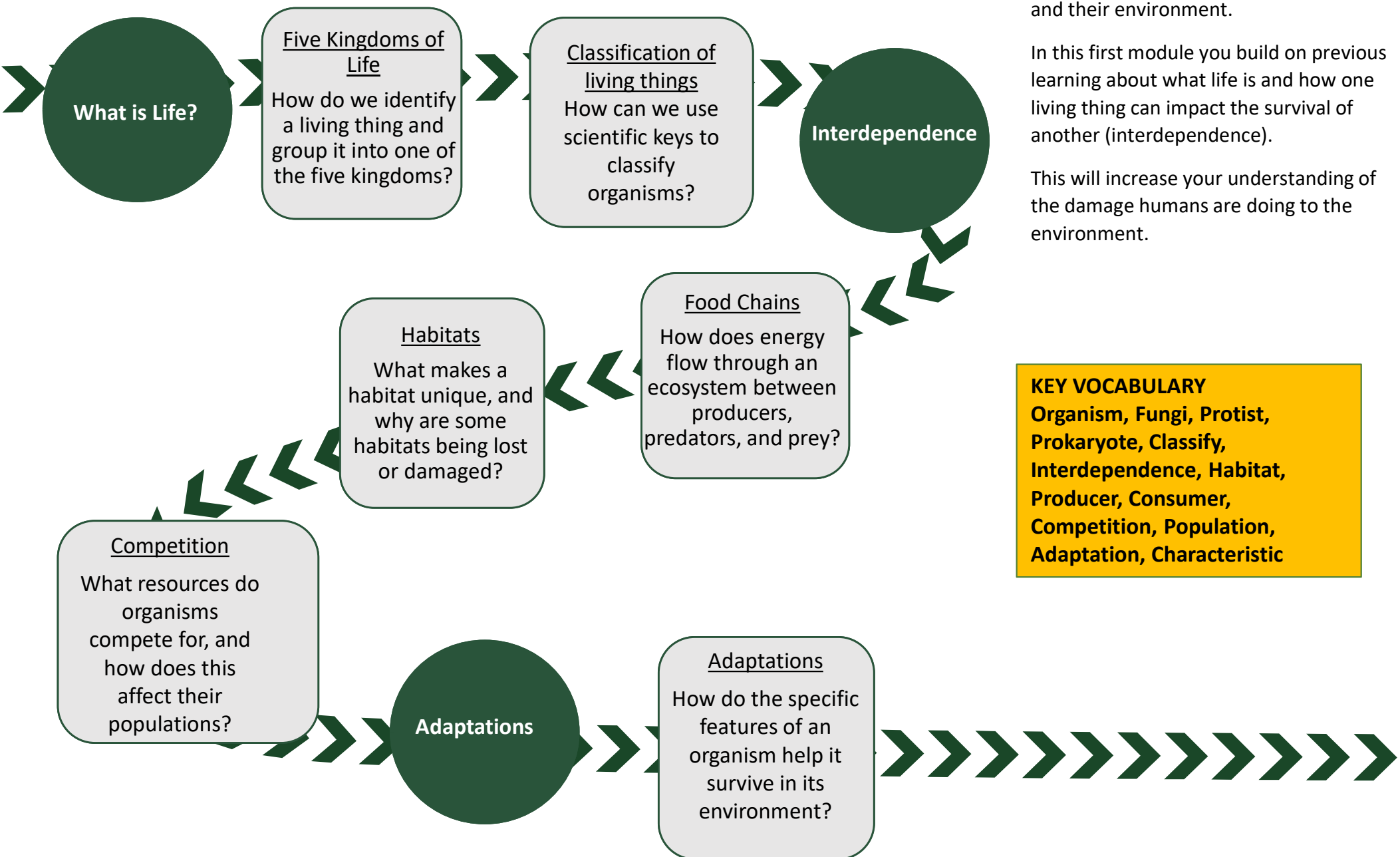




LEARNING JOURNEY

Biology

7.1 Life



Biology is the study of living organisms and their environment.

In this first module you build on previous learning about what life is and how one living thing can impact the survival of another (interdependence).

This will increase your understanding of the damage humans are doing to the environment.

KEY VOCABULARY

Organism, Fungi, Protist, Prokaryote, Classify, Interdependence, Habitat, Producer, Consumer, Competition, Population, Adaptation, Characteristic



LEARNING JOURNEY

Biology

7.2 What is life made of?

What is life made of?

Cells

What are the parts and functions of cells?

Introduction to microscopes

What are the functions of different parts of a microscope?

Microscope images

How do we calculate magnification of a microscope?

Microscopes Practical

How can we use microscopes to safely observe cells?

Specialised Cells

What different types of cells are there, and how are they adapted for their jobs?

Tissues

How do cells group together to form tissues?

Organs

What are the important organs in animals and plants, and what do they do?

Organ Systems

What are the important systems in animals, and how do they work together?

Organ Transplant

What happens when an organ in our body fails?

Animal Dissection

How do we carry out a safe animal dissection to see internal organs?

Biology is the study of living organisms and their environment.

In this second module you build on previous learning about what life is apply it to the building blocks of life.. Cells..

This will increase your understanding of the role of cells in organisms and learn skills which allow use to observe them.

KEY VOCABULARY

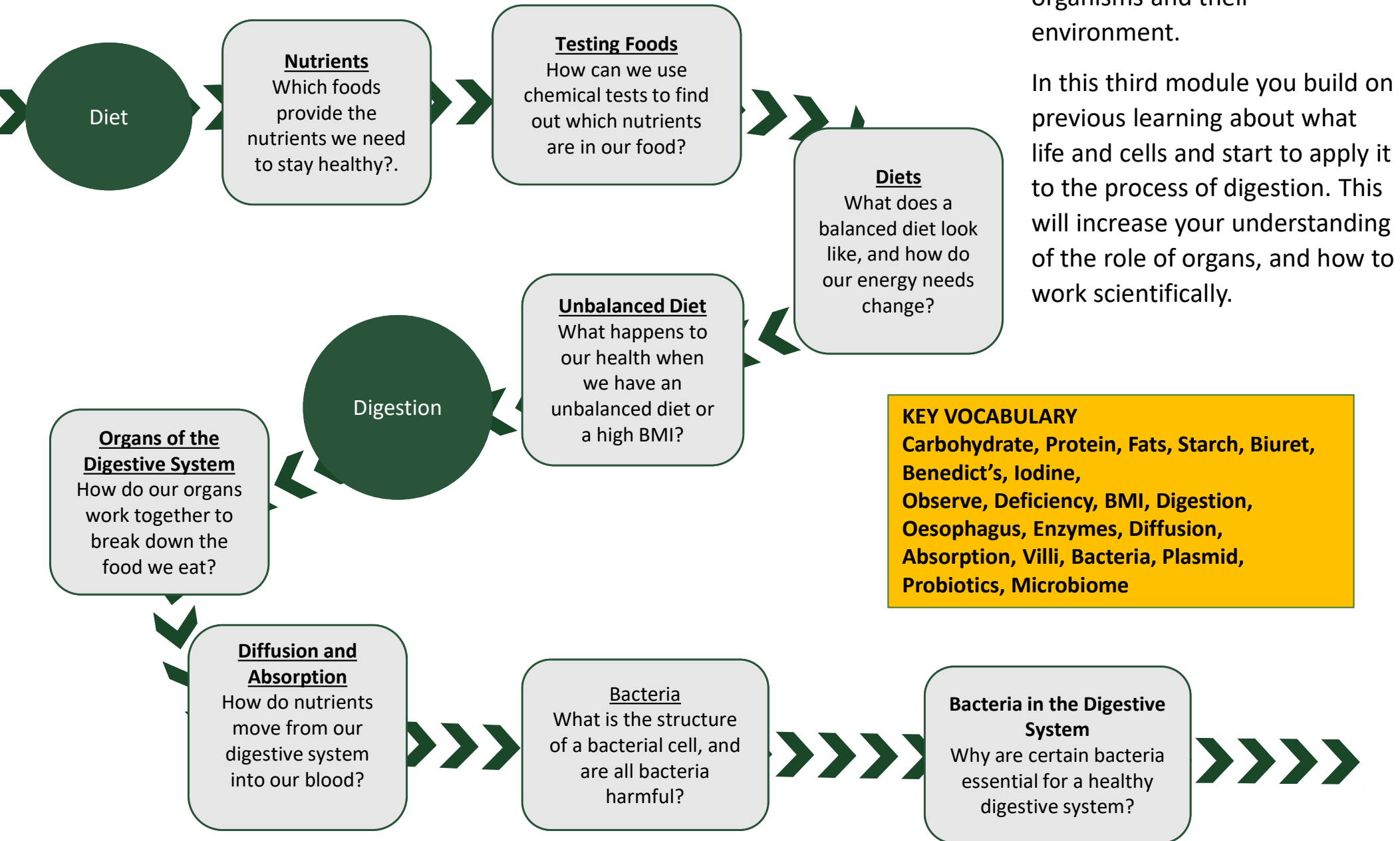
Cell membrane, Cell wall, Cytoplasm, Ribosome, Chloroplast, Vacuole, Mitochondria, Nucleus, Objective lens, Magnification, Coarse focus, Resolution, Hazard, Risk, Eukaryotic, Specialised, Organ, Tissue, Circulatory, Excretory, Respiratory, Skeletal, Ethical



LEARNING JOURNEY

BIOLOGY

B7.3 You are what you eat



Biology is the study of living organisms and their environment.

In this third module you build on previous learning about what life and cells and start to apply it to the process of digestion. This will increase your understanding of the role of organs, and how to work scientifically.



7.4 Why do we breathe?

Respiratory system

Respiratory Organs

What are the parts of the respiratory system, and how do we exchange gases in our lungs?

The Lungs and dissection

What can we learn about the structure of the lungs through dissection?

Breathing

How does the diaphragm help move air in and out of our lungs?

Lung capacity investigation

How can we measure our lung capacity and what do the results tell us?

Circulatory system

Blood

What are the different parts of our blood, and how are they specialised to keep us alive?

The heart

You will learn about the main parts of the heart and how the heart works to pump blood around the body

The heart dissection

How is the heart structured to keep blood flowing in the right direction?

Biology is the study of living organisms and their environment.

In this module you build use your previous knowledge or organ systems to explore our breathing system.

You will also explore how the breathing system is adapted to carry out it's job efficiently.

KEY VOCABULARY

Respiratory system, Trachea, Alveoli, Diaphragm, Inhale, Exhale, Emphysema, Capillary, Alveoli, Blood vessel, Artery, Heart, Vein, Blood vessels, Red blood cell, Plasma, White blood cell, Platelets, Antibodies, Anaemia, Dissection, Atrium, ventricle, Mean, Anomalous