Riddles

1. Plant Growth and Nutrition

- I start as a seed, buried in earth,

With sunlight and water, I grow in my worth.

I reach for the sky, roots deep below,

What am I, thriving as I grow?

(Answer: Plant)

2. Photosynthesis

- I make food from sunlight, water, and air,

I’m the reason green leaves are there.

Oxygen I give and glucose I make,

What process am I, for the plant's sake?

(Answer: Photosynthesis)

3. Nitrogen Fixation

- I take from the air what plants cannot use,

With help from microbes, I change and fuse.

Into the soil, I provide what's key,

What am I that helps plants grow with glee?

(Answer: Nitrogen Fixation)

4. Digestive System

- I break down the food you eat,

Absorbing nutrients, I work so neat.

From mouth to stomach and beyond,

What system am I that keeps you strong?

(Answer: Digestive System)

5. Respiratory System

- I fill your lungs with what you need,

Oxygen I bring, with every breath indeed.

In and out, I never rest,

What system am I that passes the test?

(Answer: Respiratory System)

6. Circulatory System

- I carry life through vessels so fine,

With a pump at my core, I work by design.

Blood flows through me, reaching each cell,

What system am I, can you tell?

(Answer: Circulatory System)

7. Excretory System

- I filter your blood, removing waste,

Through kidneys and bladder, at a steady pace.

I keep your balance, I keep you clean,

What system am I, often unseen?

(Answer: Excretory System)

8. History of Microbes

- I’m so small you can’t see me with your eyes,

Discovered in the past, a world of surprise.

From Pasteur to Koch, many have tried,

What am I, that in a lab, was first spied?

(Answer: Microbes)

9. Types of Microbes

- I can be good, I can be bad,

Bacteria, viruses, fungi I’ve had.

Some cause disease, some make you glad,

What am I, with a variety so rad?

(Answer: Types of Microbes)

10. Economic Importance of Microbes

- I make bread rise and help plants grow,

I clean up waste, but sometimes I sow woe.

In industry and health, I play my part,

What am I, essential from the start?

(Answer: Microbes)

Multiple-Choice Questions (MCQs)

1. Plant Growth and Nutrition

- Which of the following elements is essential for plant growth and is often a part of fertilizers?

  a) Iron

  b) Nitrogen

  c) Gold

  d) Helium

  (Answer: b) Nitrogen

2. Photosynthesis

- What is the primary pigment in plants that captures sunlight for photosynthesis?

  a) Hemoglobin

  b) Chlorophyll

  c) Carotene

  d) Melanin

  (Answer: b) Chlorophyll

3. Nitrogen Fixation

- Which type of organisms is primarily responsible for nitrogen fixation in the soil?

  a) Fungi

  b) Viruses

  c) Bacteria

  d) Algae

  (Answer: c) Bacteria

4. Digestive System

- Where does the majority of nutrient absorption occur in the human digestive system?

a) Stomach

b) Large intestine

c) Small intestine

d) Esophagus

(Answer: c) Small intestine

5. Respiratory System

- What is the primary muscle involved in breathing?

a) Diaphragm

b) Heart

c) Stomach

d) Liver

(Answer: a) Diaphragm

6. Circulatory System

- Which blood vessel carries oxygenated blood from the lungs to the heart?

a) Aorta

b) Pulmonary artery

c) Pulmonary vein

d) Vena cava

(Answer: c) Pulmonary vein

7. Excretory System

- Which organ is primarily responsible for filtering blood and producing urine?

a) Liver

b) Pancreas

c) Kidney

d) Spleen

(Answer: c) Kidney

8. History of Microbes

- Who is considered the father of microbiology for his work with microorganisms?

a) Charles Darwin

b) Gregor Mendel

c) Louis Pasteur

d) Isaac Newton

(Answer: c) Louis Pasteur

9. Types of Microbes

- Which of the following is NOT a type of microbe?

a) Bacteria

b) Virus

c) Fungus

d) Chlorophyll

(Answer: d) Chlorophyll

10. Economic Importance of Microbes

- Which microorganism is commonly used in the production of antibiotics?

a) Algae

b) Protozoa

c) Fungi

d) Virus

(Answer: c) Fungi

Puzzle

Word Search - Animal Systems and Microbes

Create a word search puzzle that includes the following terms:

- Across:
  - Digestive
  - Respiratory
  - Circulatory
  - Excretory
  - Microbes
  - Photosynthesis
  - Nitrogen Fixation
  - Bacteria
  - Fungi
  - Virus