

Unit Organizer
5th Grade Science
THE LIFE CYCLE AND ANIMAL REPRODUCTION

Colorado State Standards:

Science Standard 3.1: Students know and understand the characteristics of living things, the diversity of life, and how living things interact with each other and with their environment.

Science Standard 3.3: Students know and understand how the human body functions, factors that influence its structures and functions, and how these structures and functions compare with those of other organisms.

Science Standard 3.4: Students know and understand how organisms change over time in terms of biological evolution and genetics.

Core Knowledge Unit:

IV. Life Cycles and Reproduction

A. THE LIFE CYCLE AND REPRODUCTION

- Life cycle: development of an organism from birth to growth, reproduction, death

Example: Growth stages of a human: embryo, fetus, newborn, infancy, childhood, adolescence, adulthood, old age

- All living things reproduce themselves. Reproduction may be asexual or sexual.

Sexual reproduction requires the joining of special male and female cells, called gametes, to form a fertilized egg.

B. SEXUAL REPRODUCTION IN ANIMALS

- Reproductive organs: testes (sperm) and ovaries (eggs)
- External fertilization: spawning
- Internal fertilization: birds, mammals
- Development of the embryo: egg, zygote, embryo, growth in uterus, fetus, newborn

Previous Unit: The Endocrine System

Next Unit: Human Growth and Development

Standards for Achievement and Performance:

Can you...

- Review the two ways organisms can reproduce?
- Describe the development of an organism from birth to growth, reproduction, and death?

- List and describe each of the growth stages of a mammal: embryo, fetus, newborn, infancy, childhood, adolescence, adulthood, old age?
- Identify the reproductive organs in animals: testes (sperm) and ovaries (eggs)?
- Identify an example of external fertilization?
- Identify examples of internal fertilization?
- Describe the development of the embryo: egg, zygote, embryo, growth in uterus, fetus, newborn?

Character Education:

Self-control in studying animal reproduction

Vocabulary

life cycle
gamete
zygote
embryo
fetus
fertilization
uterus
adolescence