

Animal reproduction

Outstanding Science Year 5 - Living things and their habitats - OS5A008

National Curriculum Statutory Requirements

5A2 - describe the life process of reproduction in some plants and animals

Learning Objective

I can explain how animals reproduce sexually.



Me:   

Teacher:   

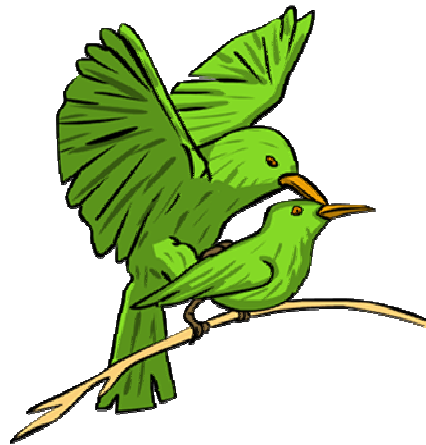
Animal reproduction

Almost all large animals (and many plants) reproduce **sexually**. This means that both a **male** and **female** are needed to produce offspring.

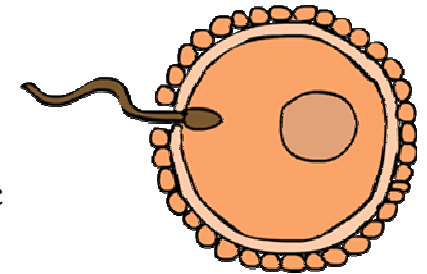
When organisms reproduce sexually, they create offspring which has some of the characteristics of both the father and mother. The offspring **inherits** its parents characteristics.

Most organisms which reproduce sexually will seek out a healthy **mate** of the opposite gender. This is because a healthy mate will pass on these characteristics to their offspring and improve their '**fitness**', or ability to survive and reproduce themselves.

All living things are made up of tiny building blocks called **cells**. Each cell contains a set of instructions to build a complete individual. These instructions are in the form of chemicals and are called **genetic information**.



Females produce **egg cells** and males produce **sperm cells**. These are tiny, special cells which each contain half of the genetic information required to build a new individual. When the male and the female come together and mate, the sperm enters the egg and **fertilises** it, creating a new cell called a **zygote**. The zygote contains both the information from the egg cell and sperm cell and contains enough information to grow into a new individual - the offspring.



A sperm cell fertilising an egg cell, forming a zygote

The zygote cell makes lots of copies of itself by growing and splitting. This group of cells is called an **embryo**.

As the embryo grows, certain cells become more specialised and will go on to form blood, bone, skin, and brain cells. The embryo starts to take on a more definite shape.

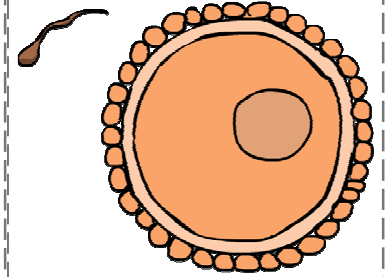
Activity

Carefully cut out the pictures and descriptions of the different stages of animal sexual reproduction. Place them on the diagram in the correct order. Write your own descriptions of what is happening at each stage. For an added challenge, write your own descriptions.

Animal sexual reproduction

[illegible]

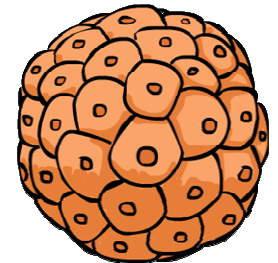
The zygote cell makes several exact copies of itself. This makes a ball of cells called an embryo. As the embryo grows, different cells start to do different functions and it develops a clearer shape.



A sperm cell enters an egg cell. This is called fertilisation. It creates a new cell called a zygote which contains all of the genetic information needed to create a new individual.



A male and female adult animal come together and mate. Many animals look for healthy mates because their offspring will inherit their characteristics and have more chance of surviving.



The male produces sperm cells and the female produces egg cells. The cells contain information from the organisms which made them. Each cell has half of the information needed to produce a new individual.

