**Asexual and Sexual Reproduction**

|  |  |
| --- | --- |
| **Asexual** | **Sexual** |
| Only involves one living organism | Involvement of both male and female parent parts |
| Does not depend on the presence of male and female parts |  |
| Offspring (babies) are IDENTICAL to parents | Unique genetic makeup (different from parent) |
| Parents and offspring share same traits (DNA, physical, behavioural) | Make up is combination of genes from both parents |
| Spores, cones, flowers | Leaves, roots, stems |

Plants can reproduce both sexually and asexually

**Plants:**

* Algae (produce spores)
* Mosses (produce spores)
* Ferns (produce spores)
* Conifers (produce cones and naked seeds AKA gymnosperms) Jim is naked\*
* Flowering plants (produce flowers and seeds protected by fruit AKA angiosperms) Angie is protected and likes flowers\*

The **order** of flowering plants and fertilization:

1. Pollination,
2. Fertilization,
3. Development of fruit or pod,
4. Adult plant,
5. Seed dispersion

Immature plant is called : Embryo

Main agents in pollination: wind, insects, animals, humans, water, plant itself…

Name the parts of the Female anatomy:

-Pistil: stigma, style, ovary, ovules (ova)

Name the parts of the Male anatomy:

- Stamen: anther, pollen (spermatozoa), filament

What are gametes? What are the gametes of the flower?

-Sex cells

EX: Spermatozoa (pollen) and ova (ovary)

PG 249:

Seed development image:

Seed coat, Embryo, Cotyledons

Reproduction in Conifers: Seed develop in the female cones once the ovules have been fertilized

(summary: cone needs fertilization before can develop)

Repro in Spores: spores are cells that contain complete genetic material, and can transform them into a young plant without fertilization\*\*\*

(summary: spores don’t need fertilization to develop)

**Homework: pg. 253**

Use the text book and your notes:

Memory check #s 1-9 for next class on a loose leaf FOR MARKS!!!!