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| Science 9 | Unit A |
| Lesson 6: Asexual vs. Sexual Reproduction | 84 mins |

***Prelesson****:*

*Characteristics are passed from one generation to another and although the offspring “look” similar to their parents, they display different physical and behavioural characteristics.*

*In this section we are going to focus on the way characteristics are passed through sexual and asexual reproduction.*

*We will include the role of* ***DNA****,* ***genes*** *and* ***chromosomes*** *in carrying the characteristics from parents to offspring.*

***Introduction****:*

*Dandelions produce dandelion seeds during reproduction. Can you imagine the seeds becoming a spruce tree, poplars, or mushrooms?*

Asexual vs. Sexual Reproduction

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| One Species’ baby will grow up to be like their parents.Reproductive Strategies: Methods used by an organism to reproduce**Asexual Reproduction****Binary fission**: the Splitting of a single-celled organism into two new organisms which are approximately equal in size.**Budding**: a smaller version of the organism grows out of the adult and when ready, becomes it’s own organism.**Sexual Reproduction****Gametes**: a cell that has only one role… to find another gamete to join with during reproduction. **Animal Reproduction Cells and Process**:**Fertilization**: the combining of the male and female gametes making a zygote. (Two halves make a whole.)The zygote undergoes cleavage, replicating until this multicellular life form is known as a embryo.Plant Reproduction Cells and ProcessPollination: When pollen combines with the ovules of the plant.The zygote grows into an embryo inside a seed. That seed protects the embryo until the conditions are right for growth of a new plant.Draw the Parts of a FlowerSexualAdv.LOTS of variationDis.Lots of energy neededLimited offspringOrganisms that Reproduce both Sexually and AsexuallyFungi/Aphids/Earthworms | Amoebas form new amoeba through binary fission. *Very few animal species can reproduce asexually. He Hammerhead Shark has been known to go through parthenogenesis, virgin birth.*My Mexican Hat PlantSex Cells, Sperm, Ova, PollenSperm Cell: the male gamete in animal sexual reproduction. (Half the genetic material)Egg Cell (Ova): the Female gamete in animal sexual reproduction. (Half the genetic material)Pollen: male gamete of a plant, found on the Stamen, or ‘male’ part of the plant.Ovules: Contain the female gametes of the plant. Found in the pistilAsexualAdv. No Specialized CellsVery QuickDis.Very little variation |