

LIFE CYCLES, REPRODUCTION and STAGES IN HUMAN GROWTH – Knowledge Organiser Year 5 Summer 2																							
Vocabulary		Stages in Human Growth	Changes in Puberty	Asexual Reproduction in Plants																			
gestation period	The amount of time it takes for a new living thing to develop in a uterus	<pre> graph TD Embryo --> Foetus Foetus --> Baby Baby --> Childhood Childhood --> Adolescence Adolescence --> Adulthood Adulthood --> OldAge[Old age] </pre>	Puberty is when a child's body begins to grow, change, and develop into an adult body. <ul style="list-style-type: none"> There are emotional and physical changes Girls usually begin puberty earlier than boys Reproductive organs mature Children have a growth spurt There is an increase in sweat production 	Plants can reproduce asexually through their stems, roots, and leaves. This does not involve the joining of sex cells. Asexual reproduction requires 1 parent and produces plants which are identical to the parent. Examples include: Bulbs Runners Tubers Rhizomes																			
adolescence	The time between the start of puberty and adulthood																						
puberty	The stage at which a person's reproductive system matures and a child's body changes into that of an adult																						
embryo	Animal or plant in the uterus in its earliest stage of development																						
foetus	Animal in the uterus in its latest stage of development before it is born																						
sexual reproduction	The process of creating a new living thing by the joining of male and female sex cells																						
asexual reproduction	The process of creating a new living thing by one parent without the joining of sex cells																						
fertilisation	The joining of male and female sex cells (e.g. egg and pollen or egg and sperm)	Sexual Reproduction in Plants																					
anther	Part of the stamen that produces pollen	<p>The diagram illustrates a flower with labels for its components: stigma, style, ovary, and ovule. The male part is labeled with anther and filament. The female part is labeled with CARPEL.</p> <table border="1"> <tr> <td>Male Parts</td> <td>Female Parts</td> </tr> </table>	Male Parts			Female Parts	Flowers have male and female sex cells. Sexual reproduction involves the transfer of pollen from the male anther to the female stigma during pollination. The pollen goes down into the ovary and joins with the egg (ovule) where fertilisation occurs and a seed is formed. This requires 2 parents and produces plants which are similar but not identical to the parents.																
Male Parts	Female Parts																						
filament	A slender stalk that supports the anther																						
stigma	Part of the carpel that receives the pollen																						
style	Part of the carpel. Connects the stigma to the ovary to allow pollen to pass to the ovules.																						
ovary	Part of the carpel that contains the ovules	Animal Life Cycles																					
ovule	The scientific word for an egg. Joins with the pollen to make a seed	<table border="1"> <tr> <td></td> <td>Mammal</td> <td>Amphibian</td> <td>Insect (Complete metamorphosis)</td> <td>Insect (Incomplete metamorphosis)</td> <td>Bird</td> </tr> <tr> <td>Starts as an egg</td> <td>x</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>Number of stages in life cycle</td> <td>7</td> <td>5</td> <td>4</td> <td>3</td> <td>4</td> </tr> </table>					Mammal	Amphibian	Insect (Complete metamorphosis)	Insect (Incomplete metamorphosis)	Bird	Starts as an egg	x	✓	✓	✓	✓	Number of stages in life cycle	7	5	4	3	4
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Starts as an egg	x	✓	✓	✓	✓																		
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metamorphosis	The process of change from a young form to an adult form in two or more distinct stages																						
nymph	Young insect which looks like the adult but does not have wings																						
pupa	Young insect in a non-feeding stage which is usually surrounded by a cocoon or case																						
larva	Young insect (or another invertebrate) which																						

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	looks very different to the adult (e.g., caterpillar)	The young look like the adult	Yes	No	No	Yes	Yes
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