

|  |  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
|--|--|--|------------------|---|----------------------------|---|----------------|-----------|--------------|------------------------|------------|--------------------------|----------------------|---|-------------------------------|---|-------------------------------|--|---|---------------|-----------------------------|----------------|------------------------------------|---|---------------------------|--|--------------------|-------------------------------------|---|-------------------------|--|---------------|--|-------------------------------|--|--|-------------------|--|-----------------------|---|------------------------|--|
| <br>Kettering<br>Science Academy | <h2>7B Sexual Reproduction in Animals</h2>   | <h3>1. Animal Sexual Reproduction</h3> <table border="1"> <tr> <td><b>Offspring</b></td><td>The new organisms produced by reproduction.</td></tr> <tr> <td><b>Sexual Reproduction</b></td><td>Reproduction that needs two parents to produce offspring.</td></tr> <tr> <td><b>Gametes</b></td><td>Sex cells</td></tr> <tr> <td><b>Sperm</b></td><td>Gamete that males make</td></tr> <tr> <td><b>Egg</b></td><td>Gamete that females make</td></tr> <tr> <td><b>Fertilisation</b></td><td>Sperm enters an egg cell and nuclei fuse forming a fertilised egg cell.</td></tr> <tr> <td><b>External Fertilisation</b></td><td>The sperm and egg cell meet outside of the body.<br/>e.g. fish</td></tr> <tr> <td><b>Internal Fertilisation</b></td><td>The sperm and egg cell meet inside the body.</td></tr> </table> | <b>Offspring</b> | The new organisms produced by reproduction. | <b>Sexual Reproduction</b> | Reproduction that needs two parents to produce offspring. | <b>Gametes</b> | Sex cells | <b>Sperm</b> | Gamete that males make | <b>Egg</b> | Gamete that females make | <b>Fertilisation</b> | Sperm enters an egg cell and nuclei fuse forming a fertilised egg cell. | <b>External Fertilisation</b> | The sperm and egg cell meet outside of the body.<br>e.g. fish | <b>Internal Fertilisation</b> | The sperm and egg cell meet inside the body. | <h3>2. Reproductive Organs</h3> <table border="1"> <tr> <td><b>Testes</b></td><td>Where sperm cells are made.</td></tr> <tr> <td><b>Scrotum</b></td><td>Bag of skin containing the testes.</td></tr> </table> | <b>Testes</b> | Where sperm cells are made. | <b>Scrotum</b> | Bag of skin containing the testes. | <h3>3. Becoming Pregnant</h3> <table border="1"> <tr> <td><b>Sexual Intercourse</b></td><td>The erect penis is inserted into the vagina.</td></tr> <tr> <td><b>Ejaculation</b></td><td>Semen is pumped out of the urethra.</td></tr> </table> | <b>Sexual Intercourse</b> | The erect penis is inserted into the vagina. | <b>Ejaculation</b> | Semen is pumped out of the urethra. | <h3>4. Gestation and Birth</h3> <table border="1"> <tr> <td><b>Gestation Period</b></td><td>The time from fertilisation until birth.</td></tr> <tr> <td><b>Foetus</b></td><td>When an embryo develops a full set of organs we call it a foetus (around 8 weeks).</td></tr> <tr> <td><b>Stages of Giving Birth</b></td><td> <ol style="list-style-type: none"> <li>contractions start and cervix begins to widen.</li> <li>amnion breaks and amniotic fluid leaves vagina.</li> <li>cervix at 10cm, stronger contractions pushes baby through.</li> <li>Umbilical cord cut.</li> </ol> </td></tr> </table> | <b>Gestation Period</b> | The time from fertilisation until birth. | <b>Foetus</b> | When an embryo develops a full set of organs we call it a foetus (around 8 weeks). | <b>Stages of Giving Birth</b> | <ol style="list-style-type: none"> <li>contractions start and cervix begins to widen.</li> <li>amnion breaks and amniotic fluid leaves vagina.</li> <li>cervix at 10cm, stronger contractions pushes baby through.</li> <li>Umbilical cord cut.</li> </ol> | <h3>5. Growing Up</h3> <table border="1"> <tr> <td><b>Afterbirth</b></td><td>The placenta is passed out of the vagina- end of labour.</td></tr> <tr> <td><b>Mammary Glands</b></td><td>Produces milk for babies- contains nutrients and antibodies to protect from disease</td></tr> <tr> <td><b>Menstrual Cycle</b></td><td> <p>Days 1-5: uterus lining lost from body (<b>menstruation</b>)</p> <p>Days 6-14: egg cell starts to mature and is released around day 14 (<b>ovulation</b>)</p> <p>Days 14+: egg cell swept towards uterus, if not fertilised cycle starts again.</p> </td></tr> </table> | <b>Afterbirth</b> | The placenta is passed out of the vagina- end of labour. | <b>Mammary Glands</b> | Produces milk for babies- contains nutrients and antibodies to protect from disease | <b>Menstrual Cycle</b> | <p>Days 1-5: uterus lining lost from body (<b>menstruation</b>)</p> <p>Days 6-14: egg cell starts to mature and is released around day 14 (<b>ovulation</b>)</p> <p>Days 14+: egg cell swept towards uterus, if not fertilised cycle starts again.</p> |
| <b>Offspring</b>   | The new organisms produced by reproduction.  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Sexual Reproduction</b>   | Reproduction that needs two parents to produce offspring.  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Gametes</b>   | Sex cells  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Sperm</b>   | Gamete that males make   |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Egg</b>   | Gamete that females make   |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Fertilisation</b>   | Sperm enters an egg cell and nuclei fuse forming a fertilised egg cell.  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>External Fertilisation</b>  | The sperm and egg cell meet outside of the body.<br>e.g. fish  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Internal Fertilisation</b>  | The sperm and egg cell meet inside the body.   |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Testes</b>  | Where sperm cells are made.  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Scrotum</b>   | Bag of skin containing the testes.   |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Sexual Intercourse</b>  | The erect penis is inserted into the vagina.   |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
| <b>Ejaculation</b>   | Semen is pumped out of the urethra.  |  |                  |   |                            |   |                |           |              |                        |            |                          |                      |   |                               |   |                               |  |   |               |                             |                |                                    |   |                           |  |                    |                                     |   |                         |  |               |  |                               |  |  |                   |  |                       |   |                        |  |
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