

| UNIT PACING GUIDE: GENETICS/ HEREDITY   |  |  |   |   |        | UNIT MATERIALS LIST |   |
|---|--|--|---|---|--------|---------------------|---|
|   | Monday   | Tuesday  | Wednesday   | Thursday  | Friday | Notes               | HOUSEHOLD MATERIALS   |
| WEEK 1  | DNA STRUCTURE AND REPLICATION  |  |   |   |        |                     | Ziplock bags<br>Strawberries<br>Coffee filters<br>Soap<br>Salt<br>Meat tenderizer<br>91% isopropyl alcohol<br>Paper cups<br>Distilled water |
|   | 1  | 2  | 3   | 4   | 5      |                     |   |
| Exploratory Pre-Lab<br>DNA Extraction<br><a href="#">All materials (click here)</a>         | Exploratory Lab<br>DNA Extraction  | Video Instruction + Notes<br>DNA Structure   | Reading Article + Video Notes<br>Discovery of DNA   | Lecture Notes + Guided Practice<br>DNA Replication  |        |                     |   |
| WEEK 2  | PROTEIN SYNTHESIS  |  |   |   |        |                     |   |
|   | 6  | 7  | 8   | 9   | 10     |                     |   |
| Flex Day  | Lecture Notes + Guided Practice<br>Protein Synthesis Overview<br><a href="#">All materials (click here)</a>        | Video Instruction + Notes<br>Protein Synthesis   | Puppy Activity<br>Protein Synthesis Application   | Flex Day  |        |                     |   |
| WEEK 3  | SMALL (DNA) MUTATIONS  |  |   | EPIGENETICS   |        |                     |   |
|   | 11   | 12   | 13  | 14  | 15     |                     |   |
| Mutations Card Activity<br>Types of Mutations<br><a href="#">All materials (click here)</a> | Dragon Activity<br>Mutations Application   | Dragon Activity<br>Mutations Application   | Flex Day  | Identical Twins Activity<br>Epigenetics<br><a href="#">All materials (click here)</a>       |        |                     |   |
| WEEK 4  | EPIGENETICS (CONTINUED)  |  | MEIOSIS AND LARGE (CHROMOSOMAL) MUTATIONS   |   |        |                     |   |
|   | 16   | 17   | 18  | 19  | 20     |                     |   |
| Identical Twins Activity<br>Epigenetics   | Flex Day   | Digital Activity (Peardeck)<br>Meiosis vs. Mitosis<br><a href="#">All materials (click here)</a> | Digital Activity (Peardeck)<br>Meiosis vs. Mitosis  | Digital Activity (Peardeck)<br>Chromosomal Mutations  |        |                     |   |
| WEEK 5  | HEREDITY   |  |   |   |        |                     |   |
|   | 21   | 22   | 23  | 24  | 25     |                     |   |
| Flex Day  | Lecture Notes + Guided Practice<br>Mendelian (Autosomal) Inheritance<br><a href="#">All materials (click here)</a> | Guided Practice<br>Mendelian (Autosomal) Inheritance   | Inquiry Activity<br>Autosomal Pedigrees   | Inquiry Activity<br>Autosomal Pedigrees   |        |                     |   |
| WEEK 6  | HEREDITY (CONTINUED)   |  |   |   |        |                     |   |
|   | 26   | 27   | 28  | 29  | 30     |                     |   |
| Inquiry Activity<br>Sex-linked Inheritance + Pedigrees                                      | Inquiry Activity<br>Sex-linked Inheritance + Pedigrees   | Lecture Notes + Guided Practice<br>Non-Mendelian Inheritance<br><i>(ADVANCED/ OPTIONAL)</i>      | Lecture Notes + Guided Practice<br>Non-Mendelian Inheritance<br><i>(ADVANCED/ OPTIONAL)</i> | Lecture Notes + Guided Practice<br>Non-Mendelian Inheritance<br><i>(ADVANCED/ OPTIONAL)</i> |        |                     |   |
| WEEK 7  | HEREDITY (CONTINUED)   |  |   |   |        |                     |   |
|   | 31   | 32   | 33  | 34  | 35     |                     |   |
| Blood Typing Notes<br>Non-Mendelian Inheritance   | Blood Typing Exploratory Lab<br>Non-Mendelian Inheritance  | Blood Typing Exploratory Lab<br>Non-Mendelian Inheritance  | Flex Day  | Flex Day  |        |                     |   |
| WEEK 8  | SOCRATIC SEMINAR   |  |   |   |        |                     |   |
|   | 36   | 37   | 38  | 39  | 40     |                     |   |
| Socratic Seminar Preparation<br><a href="#">All materials (click here)</a>                  | Socratic Seminar Preparation   | Socratic Seminar Preparation   | Socratic Seminar Preparation  | Socratic Seminar  |        |                     |   |
| WEEK 9  | SOCRATIC SEMINAR/ ARGUMENTATIVE ESSAY  |  |   |   |        |                     |   |
|   | 41   | 42   | 43  | 44  | 45     |                     |   |
| Socratic Seminar Preparation  | Socratic Seminar   | Socratic Seminar   | Argumentative Essay<br><a href="#">All materials (click here)</a>                           | Argumentative Essay   |        |                     |   |
| WEEK 10   | ARGUMENTATIVE ESSAY  |  |   |   |        |                     |   |
|   | 46   | 47   | 48  | 49  | 50     |                     |   |
| Argumentative Essay   | Flex Day   | Flex Day   | Flex Day  | Flex Day  |        |                     |   |