**Worksheet\_2**

1. For each genotype below, indicate whether it is heterozygous **(He)** or homozygous **(Ho)**

 AA \_\_\_\_\_ Ee \_\_\_\_\_ Ii \_\_\_\_\_ Mm \_\_\_\_\_

 Bb \_\_\_\_\_ ff \_\_\_\_\_ Jj \_\_\_\_\_ nn \_\_\_\_\_

 Cc \_\_\_\_\_ GG \_\_\_\_\_ kk \_\_\_\_ OO \_\_\_\_\_

 Dd \_\_\_\_\_ HH \_\_\_\_\_ Ll \_\_\_\_ Pp \_\_\_\_\_

2. For each of the **genotypes** below determine what **phenotypes** would be possible.

*Purple flowers are dominant to white Brown eyes are dominant to blue*

PP \_\_\_\_\_\_\_\_\_\_\_\_\_ BB \_\_\_\_\_\_\_\_\_\_\_

Pp \_\_\_\_\_\_\_\_\_\_\_\_\_ Bb \_\_\_\_\_\_\_\_\_\_\_\_

pp \_\_\_\_\_\_\_\_\_\_\_\_\_\_ bb \_\_\_\_\_\_\_\_\_\_\_\_\_

*Round seeds are dominant to wrinkled Bobtails are recessive (to long tails)*

RR \_\_\_\_\_\_\_\_\_\_\_\_\_ TT \_\_\_\_\_\_\_\_\_\_\_\_

Rr \_\_\_\_\_\_\_\_\_\_\_\_\_ Tt \_\_\_\_\_\_\_\_\_\_\_\_

rr \_\_\_\_\_\_\_\_\_\_\_\_\_ tt \_\_\_\_\_\_\_\_\_\_\_\_\_

3. A homozygous round seeded plant is crossed with a homozygous wrinkled seeded plant. What are the genotypes of the parents?

 \_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_

4. Set up the Punnett squares for each of the crosses listed below. Brawn eyes are dominant to blue eyes.

 **Bb x bb Bb x Bb**

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

**BB x Bb BB x Bb**

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |

This worksheet was modified from:

<https://www.biologycorner.com/worksheets/genetics_practice.html>

Biologycorner by [Shannan Muskopf](https://www.biologycorner.com/) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/)