

Name: \_\_\_\_\_ Pd: \_\_\_\_\_ Date: \_\_\_\_\_

## Biology - Harry Potter Punnett Squares Practice

Complete the following Punnett squares. Be sure to include:

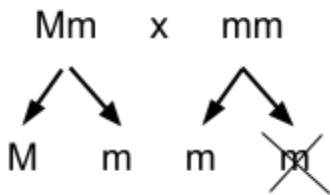
1. A key to explain which trait is dominant and which is recessive
2. A completed Punnett square
3. The genotypic and phenotypic ratio for the offspring

**Example:** Tom Riddle's mother was able to do magic, but was heterozygous for this trait. Tom Riddle's father was a muggle (he could not do magic) and he was homozygous for this trait.

**KEY:**

**M** = Magic (dominant)

**m** = Non-magic (recessive)



|          |           |           |
|----------|-----------|-----------|
|          | <b>M</b>  | <b>m</b>  |
| <b>m</b> | <b>Mm</b> | <b>mm</b> |
|          |           |           |

**Genotypic ratio:**

1/2 Mm : 1/2 mm

**Phenotypic ratio:**

1/2 Magical: 1/2 Non-magical

1. Harry Potter is a natural seeker in the wizarding sport of quidditch (**NN**). His wife Ginny has never been able to play the seeker position (**nn**).

**N** = \_\_\_\_\_

**n** = \_\_\_\_\_

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

**Genotypic ratio:**

\_\_\_\_ NN : \_\_\_\_ Nn : \_\_\_\_ nn

**Phenotypic ratio:**

\_\_\_\_ Seeker : \_\_\_\_ Non-Seeker

2. Professor McGonagall is an animagus, meaning that she has the ability to turn into an animal when she wants. The animagus trait is recessive (**aa**). Professor McGonagall falls in love and marries Professor Snape (**Aa**), who is not an animagus, even though his mother was one.

**A** = \_\_\_\_\_

**a** = \_\_\_\_\_

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

Genotypic ratio:

Phenotypic ratio:

3. Parseltongue is the rare ability to speak to snakes. Although this trait is rare, it is dominant. Lord Voldemort is heterozygous for the parseltongue ability. He has a child with the witch Bellatrix Lestrange. Bellatrix is homozygous recessive for this trait.

\_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ = \_\_\_\_\_

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

Genotypic ratio:

Phenotypic ratio:

4. In the wizarding world, the ability to taste rat-tail and having red hair are recessive traits. Mr. Weasley, who has red hair, is unable to taste the horribly bitter rat-tail although his father could. His wife Mrs. Weasley, who also has red hair is also unable to taste rat-tail, but her mother could.

\_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ = \_\_\_\_\_

\_\_\_\_\_ = \_\_\_\_\_

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

Genotypic ratio:

Phenotypic ratio: