# GoBio Interactive Worksheets

**PATTERNS OF INHERITANCE**

## LET'S PLAY JEOPARDY! - Drag and Drop

| Who Done It? | Plants and Pollen | Genotype and Phenotype | Dominance or Not |
|---|---|---|---|
| Monk who documented inheritance | Plants when bred to themselves will always produce organisms with same phenotype | Forms of a genes that determine a specific trait | The actual genetics of an organism |
| Plant that Mendel used in his experiments | When a flower pollinates itself. | Section of a chromosome that codes for a trait | Allele that is expressed when present |
| Job held by Mendel while studying genetics | Male gamete of a plant | Form of a trait that gets expressed | Allele that must be inherited from both parents to be expressed |

| | | | |
|---|---|---|---|
| Alleles | Dominant | Monk | Phenotype |
| Recessive | Gregor Mendel | Gene | Pollen |
| True-breeding | Genotype | Pea plant | Self-pollenating |

**Homozygous dominant =** ☐ ☐

**Homozygous recessive =** ☐ ☐ ☐

**Heterozygous =** ☐ ☐ ☐ ☐ ☐ ☐ ☐

**Ww** **rr** **aa** **Ss** **Aa** **BB** **Yy** **Ee**

**Tt** **Bb** **RR** **bb**

Bb X Bb

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

bb    BB or Bb    BB or Bb    BB or Bb
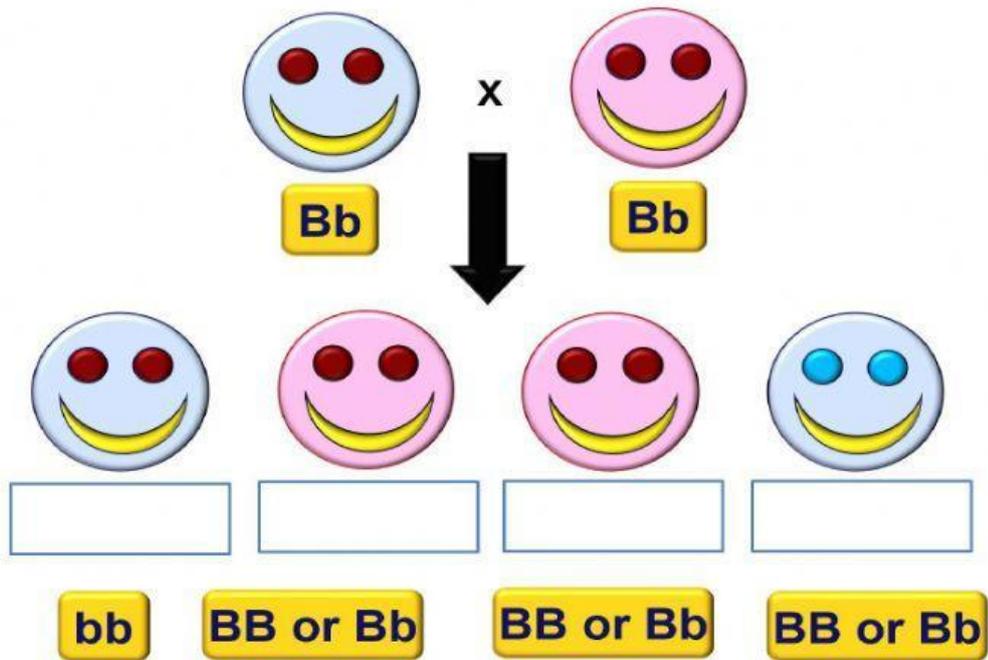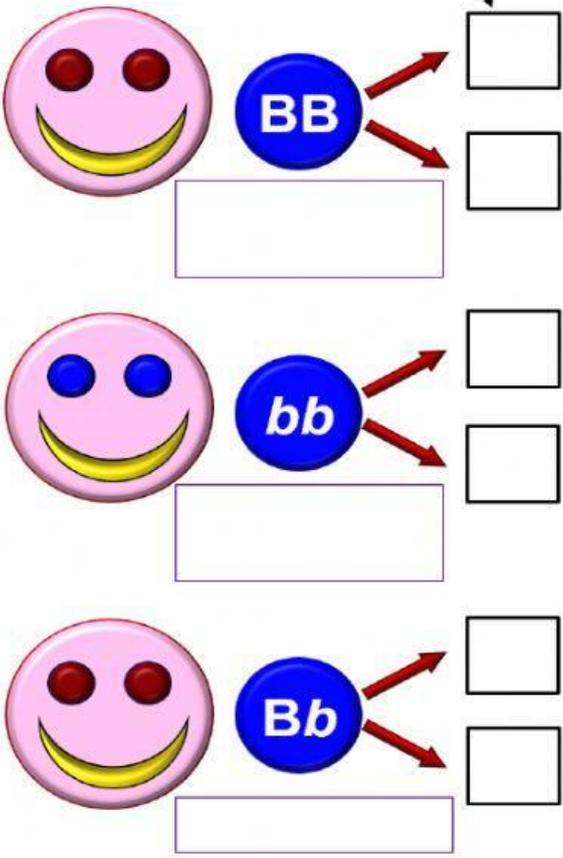
**Making gametes! Type in correct answers**

BB = brown eyes
bb = blues eyes
Bb = brown eyes

_____ = can mask others

_____ = can be hidden

→ brown is _____ over blue
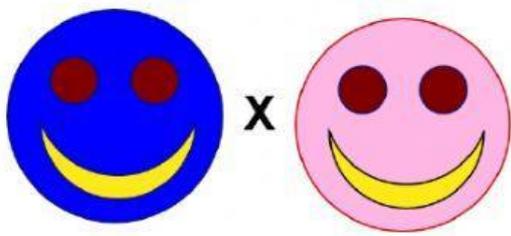→ blue is _____ to brown

Don't forget these!

BB

bb

Bb

LIVEWORKSHEETS

Complete/Simple
Dominance

Monohybrid Cross = 1 trait

## Bb x Bb

B x

male / sperm

B B B
b b b
BB BB BB
Bb Bb Bb
bb bb bb

female / eggs

## Pp x Pp

male / sperm

female / eggs

| | % genotype | % phenotype |
|---|---|---|
| PP | 25% | 75% |
| Pp | 50% | |
| pp | 25% | 25% |

A red (R) rooster and a white (r) hen are mated. They produced four offspring: 2 reds and 2 whites. What are the genotypes of the parents?
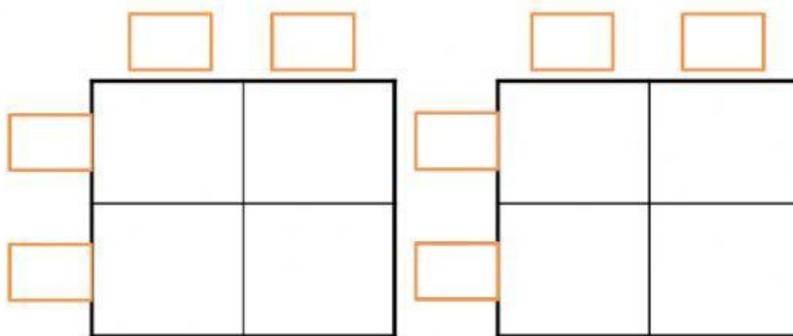
Alleles
  R = red
  r = white

Possible parents
  Male = _____
  Female = _____

Your answer to the question: _____