Dihybrid Cross and Karyotype Quiz

Assignments being collected today!

**IN:** What word is the closest synonym for *allele*? (trait, phenotype, gene, gamete) for *principle*? (leader, law, standard, expectation)

**OBJ:** Summarize the concepts of genetics.

**NOTES:**

**ASSIGNMENT:** Create a concept map in groups.

**OUT:**
Creating a CONCEPT MAP about genetics.

A concept map is a tool for showing the vocabulary and ideas that you have learned about a concept, in this case genetics.

In making a concept map you are encouraged to connect ideas in ways which make sense, but have not been identified through class work and studying.

Active participation by all group members will help every group member to know and understand more than he or she did before starting the concept map.

Rules and guidelines for creating a concept map:

1. All words must be added BUT a word cannot be added/written without being connected. Words are added one at a time.
2. All words must have at least one connection. The more connections you can make for a word shows deeper/better understanding of that word.
3. As words are added, extra connections are also added.
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment

trait
traits are passed through genes
is the study of how traits are passed

genes

genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment

trait
traits are passed through genes.

gene
is the study of how traits are passed.

genetics

traits are passed through genes.
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment
Dog colors: the genes and alleles for color are B=black, W=white.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>B_W</td>
<td>B_W</td>
</tr>
<tr>
<td>W</td>
<td>B_W</td>
<td>B_W</td>
</tr>
</tbody>
</table>

**DOMINANCE**
P=BLACK
P=WHITE
F1=

**genes and traits**
- genetics
- trait
- gene
- phenotype
- genotype
- gamete
- dominant
- recessive
- purebred
- hybrid
- homozygous
- heterozygous
- law of dominance
- law of segregation
- law of independent assortment
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment

Dog colors: the genes/alleles for color are
B=black
W=white

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>BW</td>
<td>BW</td>
</tr>
<tr>
<td>W</td>
<td>BW</td>
<td>BW</td>
</tr>
</tbody>
</table>

DOMINANCE
P=BLACK
P=WHITE
F1=BLACK
genetics
trait
gene
phenotype
genotype
gamete
dominant
recessive
purebred
hybrid
homozygous
heterozygous
law of dominance
law of segregation
law of independent assortment

Dog colors: the genes
alleles for color are
B=black
W=white

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>W</td>
<td>BW BW</td>
</tr>
<tr>
<td>W</td>
<td>BW BW</td>
</tr>
</tbody>
</table>

DOMINANCE
P=BLACK
P=WHITE
F1=BLACK

CODOMINANCE
P=BLACK
P=WHITE
F1=
Dog colors: the genes /alleles for color are
B=black
W=white

**DOMINANCE**
P=BLACK
P=WHITE
F1=BLACK

**CODOMINANCE**
P=BLACK
P=WHITE
F1=SPOTTED
Dog colors: the genes/alleles for color are
B=black
W=white

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>BW</td>
<td>BW</td>
</tr>
<tr>
<td>W</td>
<td>BW</td>
<td>BW</td>
</tr>
</tbody>
</table>

**DOMINANCE**
P=BLACK
P=WHITE
F1=BLACK

**CODOMINANCE**
P=BLACK
P=WHITE
F1=SPOTTED

**INCOMPLETE DOMINANCE**
P=BLACK
P=WHITE
F1=
Dog colors: the genes /alleles for color are
B=black
W=white

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>BW</td>
</tr>
<tr>
<td>W</td>
<td>BW</td>
</tr>
</tbody>
</table>

**DOMINANCE**
P=B=BLACK
P=W=WHITE
F1=B=BLACK

**CODOMINANCE**
P=B=BLACK
P=W=WHITE
F1=S=SPOTTED

**INCOMPLETE DOMINANCE**
P=B=BLACK
P=W=WHITE
F1=G=GREY
Dog colors: the genes /alleles for color are
B=black
W=white

DOMINANCE
P=BLACK pure
P=WHITE
F1=BLACK

CODOMINANCE
P=BLACK both
P=WHITE
F1=SPOTTED

INCOMPLETE DOMINANCE
P=BLACK blended
P=WHITE
F1=GREY
Dog colors: the genes / alleles for color are
B = black
W = white

DOMINANCE
P = BLACK pure
P = WHITE
F1 = BLACK

CODOMINANCE
P = BLACK both
P = WHITE
F1 = SPOTTED

INCOMPLETE DOMINANCE
P = BLACK blended
P = WHITE
F1 = GREY
OUT: (complete on a separate piece of paper to turn in with your concept map)

Make a list (or write a paragraph) about everything you know about genetics. The concept map was your prewriting or planning for this activity.
Assignments Collected
Meiosis Flip Book
Bikini Genetics Dihybrid Cross Practice
Human Karyotype Activity
Dihybrid Cross Lab
Concept Map and the Summary List or Paragraph