

Genetics Study Guide

1. What traits of a plant could be affected by environment?

leaf color, bean production, plant height Color of leaves (how green, yellow, or brown), height of plant (plants with all of their needs met grow taller), ability to reproduce (healthier plants make more seeds for new plants), amount of fruit/flowers produced, root health

2. What are 2 names for the blueprint that gives plants & animals all the characteristics they begin life with?

genes; DNA

3. What part of the body copies DNA?

Cells -- located in the nucleus

4. Why do offspring often look like their parents?

they have similar DNA; characteristics are passed down from parent to offspring

5. If two siblings have the same eye color, what can be concluded about the parents?

parents have the same eye color

6. Why might two rabbits who live in the same forest look alike?

they have the same parents; similar dna; they are from the same family/population

7. If a mama dog is 37" tall and a daddy dog is 45", where will their offspring's heights probably fall?

Between 37" and 45" tall

8. If a mom has red hair and her child has blond hair, what is *most likely* true about the child's father?

The father probably has blond hair.

9. What are some inherited characteristics that would protect animals from predators?

fur color, camouflage, claw/tooth size, poison/venom, eyesight, spikes or shell, nocturnal, sense of smell, hearing

Trait	Inherited, Acquired, Both?	Trait	Inherited, Acquired, Both?
Hair color	inherited	Height	both
Eye color	inherited	Weight	both
Balancing a ball	acquired	Speed	both
Dog doing a trick	acquired	Teeth shape	inherited
Chimp communicating with sign language	acquired	Music preference	acquired
Spider spinning a web	inherited	Ability to read	acquired
Webbed feet	inherited	Ability to ride a bike	acquired
Missing tooth	acquired	Bruise	acquired
Eyesight	inherited	Whining to get your way	acquired
Long hair	both	Shoe type	acquired
Rolling your tongue	inherited	Fur color	inherited
Hair style	acquired	Cooking skills	acquired
Ability to run fast	both	Animal swimming	inherited
Fingerprints	acquired	Shape of nose	inherited
Favorite food	acquired	Interest in sports	acquired

Ability to speak French	acquired	Attitude	acquired
Work ethic	acquired	Color blindness	inherited