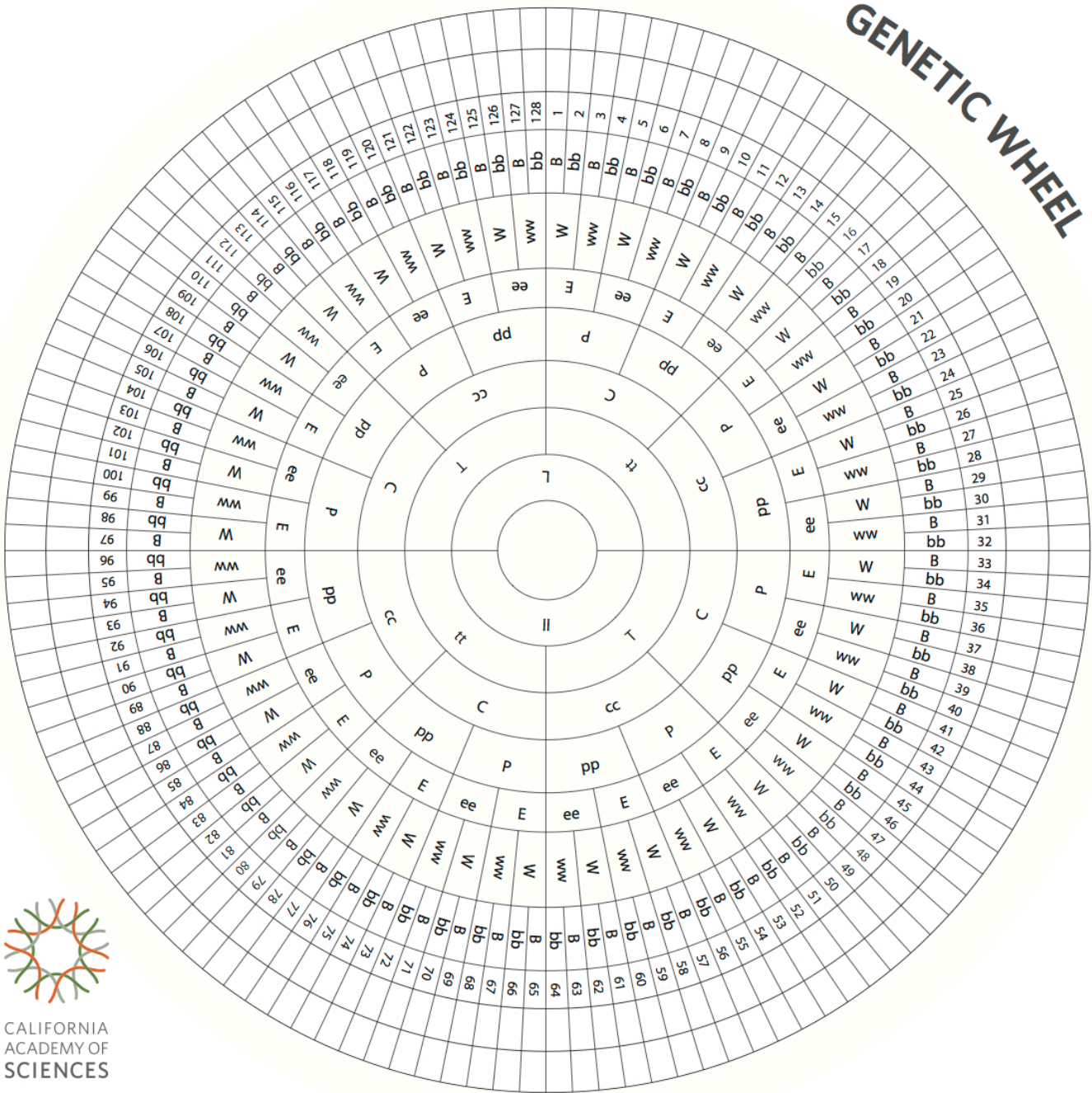


GENETIC WHEEL



CALIFORNIA
ACADEMY OF
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Directions

Look at the table on the back. Start with trait #1. Use the question to decide if you have a recessive or dominant genotype for the trait. Shade in the part of the circle corresponding to your answer (L or ll). Consider trait #2. Starting from where you just shaded for trait #1, shade the part of the circle corresponding to your answer (C or cc). Continue for the rest of the traits until you reach a number.

Vocabulary

Dominant

Recessive

Allele

Genotype

Phenotype

Phenotypes (Traits)	Recessive	Dominant
1. Laugh dimples: When you laugh or smile do you have dimples in your cheeks?	No (ll)	Yes (L)
2. Tongue roll: Can you roll your tongue into a “U” shape?	No (tt)	Yes (T)
3. Crossing thumbs: When you clasp your hands together with your fingers intertwined, is your right thumb on top of your left or vice versa?	Right on top (cc)	Left on top (C)
4. Pinkies: When you put your hands side by side with the palms facing you, are your little fingers straight or do their ends bend noticeably toward the ring fingers?	Straight (pp)	Bent (P)
5. Ear lobes: Are your earlobes attached directly to the side of your face or do they hang down freely a bit?	Attached (ee)	Free (E)
6. Widow’s peak: Does the hair at the top of your forehead form a straight line, or does it come down in a distinct V-shape in the center?	Straight (ww)	V-shaped (W)
7. Bending thumbs: When you give the thumbs up sign is the tip of your thumb bent back at an angle of 50 degrees or more?	Bent (bb)	Straight (B)

Questions

For how many traits did you have a recessive genotype?

For how many traits did you have a dominant genotype?

What is the difference between recessive and dominant?

What is the difference between genotype and phenotype?

If your mom has a genotype of BB and your dad has a genotype of bb, what genotype will you have?

Do you think people in your family have similar genotypes and phenotypes? Why or why not?