

In your textbook, read about Mendel's monohybrid crosses.

Refer to the table of pea-plant traits on the right. Then complete the table on the left by filling in the missing information for each cross. The first one is done for you.

Parent Plants	F ₁ generation	
	Offspring	Appearance
8. round × wrinkled <i>RR</i> × <i>rr</i>	<i>Rr</i>	round
9. yellow × green <i>YY</i> × <i>yy</i>	a.	b.
10. axial × terminal <i>AA</i> × _____	<i>Aa</i>	a.
11. tall × short _____ × _____	<i>Tt</i>	a.
12. inflated × constricted _____ × <i>ii</i>	a.	b.

Pea-Plant Traits		
Trait	Dominant	Recessive
seed shape	round (<i>R</i>)	wrinkled (<i>r</i>)
seed color	yellow (<i>Y</i>)	green (<i>y</i>)
flower position	axial (<i>A</i>)	terminal (<i>a</i>)
plant height	tall (<i>T</i>)	short (<i>t</i>)
pod shape	inflated (<i>I</i>)	constricted (<i>i</i>)

In your textbook, read about phenotypes and genotypes and Mendel's dihybrid crosses.

If the statement is true, write **true**. If it is not, rewrite the underlined part to make it true.

13. A pea plant with the genotype *TT* has the same phenotype as a pea plant with genotype *tt*. _____
14. When Mendel crossed true-breeding pea plants that had round yellow seeds with true-breeding pea plants that had wrinkled green seeds, some of the offspring had round yellow seeds because round and yellow were the dominant forms of the traits. _____
15. When Mendel allowed heterozygous F₁ plants that had round yellow seed to self-pollinate, he found that some of the F₂ plants had wrinkled green seeds. _____
16. The law of independent assortment states that genes for different traits are inherited independently of each other. _____