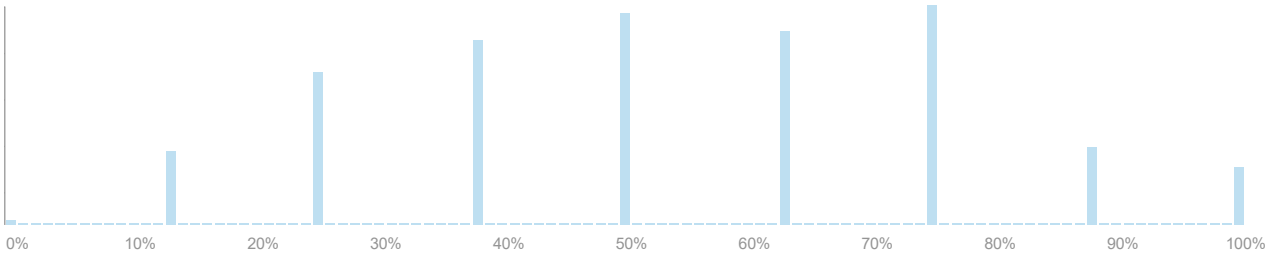
Quiz Summary

Section Filter | Student Analysis | Item Analysis

Average Score	High Score	Low Score	Standard Deviation	Average Time
54%	100%	0%	1.86	01:19:64



Question Breakdown

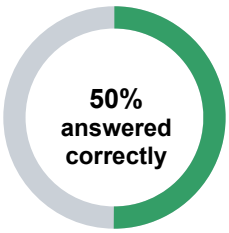
Attempts: 453 out of 453

Which of the following is true about a plant that Mendel found to be 'true breeding' for purple flowers?

+0.49

Discrimination Index

The plant is heterozygous for flower color	57 respondents	13 %
The plant is homozygous for flower color	227 respondents	**50 %** ✔
Purple is the dominant flower color	160 respondents	35 %
Purple is the recessive flower color	9 respondents	2 %



Attempts: 453 out of 453

+0.24

Discrimination Index ?

Look at the table below and determine which allele is dominant.

generation	wrinkled peas	smooth peas
P	5 true-breeding wrinkled plants	5 true-breeding smooth plants
F_1	0 wrinkled peas	281 smooth peas
F_1	0 plants from wrinkled peas	self-cross 253 plants from F_1 smooth peas
F_2	1,850 wrinkled peas	5,474 smooth peas

Table 3.2 Results from mating true-breeding plants that produced smooth or wrinkled peas. Data from Mendel.

Wrinkled peas	12 respondents	3 %
Smooth Peas	437 respondents	**96 %** ✔
Cannot determine from this information	4 respondents	1 %

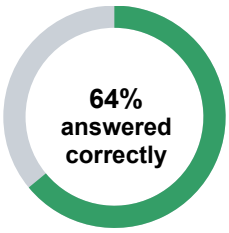
Attempts: 453 out of 453

The fatal human illness called **Huntington disease** (http://www.mayoclinic.org/diseases-conditions/huntingtons-disease/basics/definition/con-20030685) is caused by a dominant mutant allele. Calculate the probability that a couple will have a child with the disease if the father is heterozygous and the mother is homozygous recessive.

+0.40

Discrimination Index

1 in 2 or 50%	290 respondents	**64 %**	✔
1 in 3 or 33%	17 respondents	4 %	
1 in 4 or 25%	143 respondents	32 %	
1 in 5 or 20%	3 respondents	1 %	



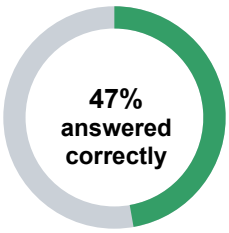
Attempts: 453 out of 453

The fatal human illness called **Huntington disease** (http://www.mayoclinic.org/diseases-conditions/huntingtons-disease/basics/definition/con-20030685) is caused by a dominant mutant allele. Calculate the probability that a couple will have two children with the disease if the father is heterozygous and the mother is homozygous recessive.

+0.44

Discrimination Index

1 in 2 or 50%	109 respondents	24 %
1 in 4 or 25%	214 respondents	**47 %** ✔
1 in 8 or 12.5%	64 respondents	14 %
1 in 16 or 6.24%	66 respondents	15 %



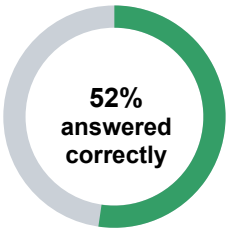
Attempts: 453 out of 453

The fatal human illness called **Huntington disease (http://www.mayoclinic.org/diseases-conditions/huntingtons-disease/basics/definition/con-20030685)** is caused by a dominant mutant allele. Calculate the probability that a couple will have a child with at least one copy of the recessive allele if the father is heterozygous and the mother is homozygous recessive.

+0.62

Discrimination Index ?

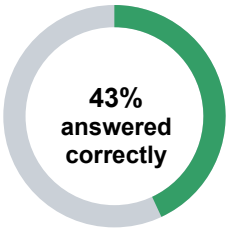
1 in 4 or 25%	71 respondents	16 %
1 in 2 or 50%	85 respondents	19 %
3 in 4 or 75%	60 respondents	13 %
1 in 1 or 100%	237 respondents	**52 %** ✔



Attempts: 450 out of 453

If you mated a YYSS pea plant with a yyss pea plant, how many green plants would you have in the F2 generation assuming you produced 16 pea plants? Write your answer as a whole number.

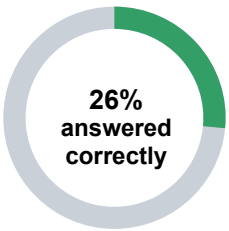
4.00	195 respondents	**43 %**	✓
4.00		**0 %**	✓
4.00		**0 %**	✓
4.00		**0 %**	✓
Something Else	255 respondents	56 %	
No Answer	3 respondents	1 %	



Attempts: 450 out of 453

If you mated a YYSS pea plant with a yyss pea plant, how many green smooth plants would you have in the F2 generation assuming you produced 16 pea plants? Write your answer as a whole number.

3.00	120 respondents	**26 %**	✓
3.00		**0 %**	✓
3.00		**0 %**	✓
3.00		**0 %**	✓
Something Else	330 respondents	73 %	
No Answer	3 respondents	1 %	



Attempts: 452 out of 453

If you cross a YySS plant with a yySs plant, how many yySs plants do you expect in the F1 generation if you produce 16 plants?

4.00	235 respondents	**52 %**	✓
4.00		**0 %**	✓
4.00		**0 %**	✓
4.00		**0 %**	✓
Something Else	217 respondents	48 %	
No Answer	1 respondents	0 %