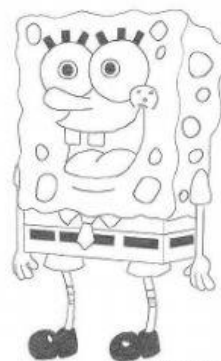


LS3 Quiz 2 Review

Use this table to answer the questions that follow.

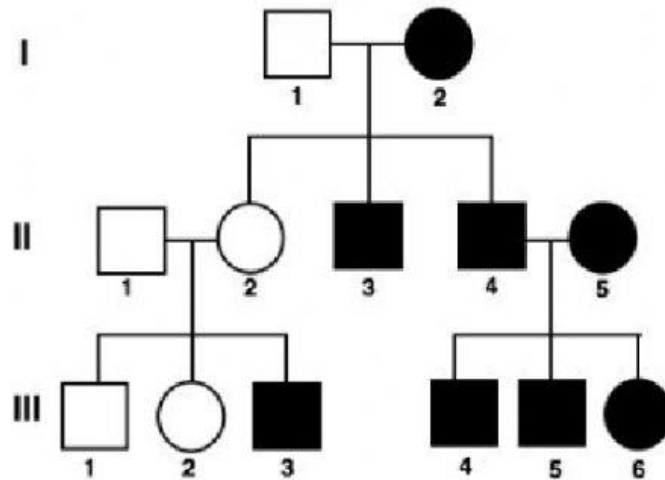
CHART #1

Trait	Dominant Gene	Recessive gene
Body Shape	Squarepants (S)	Roundpants (s)
Body Color	Yellow (Y)	Blue (y)
Eye shape	Round (R)	Oval (r)
Nose style	Long (L)	Stubby (l)



- Use the information in the table to write the phenotype for each item.
 - LL _____
 - Yy _____
 - Ss _____
 - rr _____
- Use the information in chart #1 to write the genotype (**or genotypes**) for each trait below.
 - Yellow body: _____
 - Square pants: _____
 - Stubby nose: _____
 - Blue body color: _____
- One of Spongebob's cousins, SpongeBilly, recently met a cute Squarepants girl named SpongeGerty at a local dance and fell in love. If SpongeGerty's father is heterozygous squarepants and her mother is a roundpants, what is her genotype? Fill in the Punnett square to show the possibilities. Based on those results, what would Gerty's genotype have to be? _____

4. Determine the genotypes for each individual in the pedigree. Then use the pedigree chart to answer the following questions.



5. ____ In the chart, a blank square or circle indicates that the person
- Does have a certain trait
 - Does not have a certain trait
 - Might have a certain trait
6. ____ In the chart, how many females show the trait (are affected)?
- 2
 - 3
 - 5
 - 7
7. ____ What is the genotype for individual II-2?
- Heterozygous
 - Homozygous dominant
 - Homozygous recessive
 - We can't tell
8. ____ How many children are in the second generation?
- 2
 - 3
 - 5
 - 6