• What is the chance of having a squarepants? \_\_\_ What is the chance of having a blue squarepants? \_\_\_\_\_

• What is the chance of having a purebred recessive for both traits? \_\_\_

Name		

## SpongeBob Squarepants PROB SET #2 – Dihybrid Crosses!

Use the chart to	identify the	denotypes o	f the fol	lowing	traite:

Heterozygous round eyes, blue body	Trait	Dominant Gene	Recessive Gene	
	Body Shape	Squarepants (S)	Roundpants (s)	
Hybrid eye shape, purebred roundpants	Body Color	Yellow (Y)	Blue (y)	
Purebred roundpants, heterozygous long nose	Eye Shape	Round (R)	Oval (r)	
Heterozygous body color, hybrid nose style	Nose Style	Long (L)	Stubby (I)	
SpongeBob's aunt, who is a roundpants, has a cute stubby no dreams and is ready to settle down. Her fiancé always comme nose is (he says it reminds him of his mother's – aww, how sw chances are of that trait being passed on. Her fiancé is a purel purebred long nose.  5) Identify the genotypes of the aunt and her fiancé.  Aunt – Roundpants, Stubby Nose =	nts on how adorable eet!). They wonder	her what the	her	
Fiancé – Purebred Squarepants, Long Nose =		2		
riance – Furebred Squarepants, Long Nose –				
6) What are the possible <b>gamete combinations</b> for each pers	on? Aunt =	Fiancé =		
7) What are the possible genotypes for their children?			_	
8) What are the genotypes of SpongeBob, who is heterozygou his wife SpongeSusie, who is blue and has roundpants?	s for his yellow bod	y color <b>and</b> his squa	arepants, and	
SpongeBob = SpongeSusi	e =			
9) What are the possible gamete combinations for each pers	on?			
SpongeBob =	Spon	geSusie =	_	
10) Complete the Punnett square based on the information pro	ovided in #8-9 and t	nen answer the que:	stions.	
			$\neg$	
	11			
What is the chance of having a blue baby?				