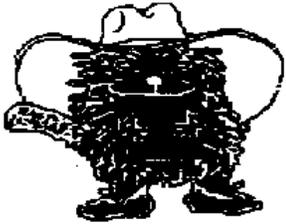

Name _____

Gleeps Lab

Hour _____



Gleeps are imaginary animals.

They come in **BLACK** or **WHITE**.

They Reproduce sexually and pass their colors on to their young.
Inheritance patters are the same as in peas or people.



Gleeps can be Purebred or Hybrid. Use the pictures below to answer the following questions:

I'm Purebred

I'm Hybrid

I'm Purebred

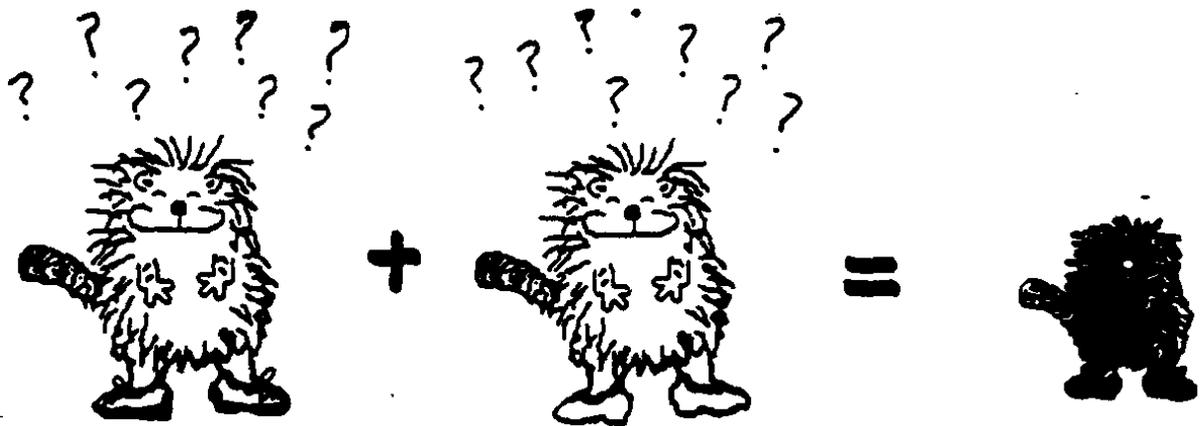


1. Are all white Gleeps Purebred or Hybrid? _____
2. Some Black Gleeps are Purebred, What are the other black gleeps? _____
3. Do purebred Black and Hybrid Gleeps look alike or different?

4. What color do Hybrid Gleeps always have to be? _____

Let's Practice!!

Look at the parents and the baby Hybrid gleep carefully (remember the baby is black!).
And both parents are purebred.



You have one container of **black beans** (Black Gleeps) and one container of **white beans** (White Gleeps).

- A. **Without looking!!** Pick up one bean from each cup. You have just crossed or mated the two purebred Gleeps.
- B. Lay the pair of beans side by side on your desk. Repeat step A until you have 50 hybrid baby Gleeps on your desk.

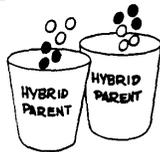
6. How many color options (or genes) does a hybrid baby gleep have? _____

7. Why are hybrid Gleeps always black? _____

Activity #2- Crossing Hybrid+ Hybrid= ????



Each container now stands for two hybrid parents. Place 25 black & 25 white beans into each cup; mix well.



**** Remember!! Each parent can only give one color of gene to their offspring!****

- A. **Without looking!!** Pick up one bean from each cup. You have just crossed or mated the two hybrid Gleeps.
- B. Lay the pair of beans side by side on your desk. Have your partner record the color on the table below. Repeat step A until you have 50 baby Gleeps on your desk.

Offspring	Purebred Black (black+ black)	Hybrid (Black+ White)	Purebred White (White+ White)
Mark your results in these box →			
Your Totals			
Results from all other lab groups:			
GRAND TOTALS			

Activity #3- Horses

Note: Brown hair dominates over white hair.

- A. **Cross a pure brown horse (brown bean) with a pure white horse (white bean) 50 times.**
 - 8. Record the following: what are the offspring types and the percent that that occurred?

Type _____

Percent of times they occurred _____

B. Cross a hybrid brown mare with a hybrid brown stallion 50 times. Record your results

Offspring	Purebred Brown (brown+ brown)	Hybrid (Brown+ White)	Purebred White (White+ White)
Mark your results in these box →			
Your Totals			
Results from all other lab groups:			
GRAND TOTALS	%	%	%



Activity #4- Shorthorn Cows



Note- Neither Red- Haired genes or white haired genes are dominant!!

A. Cross a pure red cow (brown bean) with a pure white bull (white bean) 50 times.

9. Record the following: what are the offspring types and the percent that that occurred?

Type _____

Percent of times they occurred _____

B. Cross a hybrid roan cow with a hybrid roan bull 50 times. Record your results

Offspring	Purebred Red (brown+ brown)	Hybrid- ROAN (Brown+ White)	Purebred White (White+ White)
Mark your results in these box →			
Your Totals			
Results from all other lab groups:			
GRAND TOTALS	%	%	%