

BABY MIX-UP

PURPOSE: To give practice in the study of blood types by working backwards from the known types of the offspring to the unknown types of the parents.

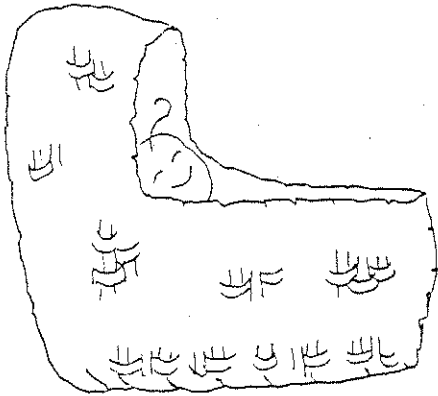
MATERIALS: The Baby Mix-Up can be duplicated or put on the chalkboard.

PROCEDURE: Work the problem by means of Punnett squares, using all possible gene combinations. Six Punnett squares are provided; more will be needed.

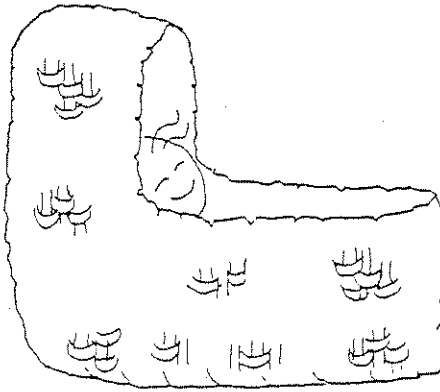
EXAMPLES:

Type O blood, only OO genes
Type AB blood, only A and B genes
Type A blood, genes A or O
Type B blood, genes B or O

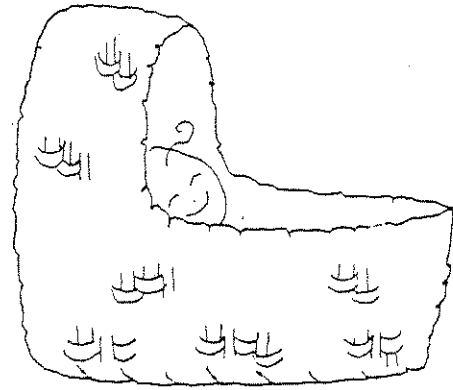
BABY MIX-UP



Baby A



Baby B



Baby C

In a hospital three babies were born simultaneously during a thunderstorm. The lights went off for a few seconds. During that time the babies were mixed. The hospital wants to be sure that it is giving the right baby to the right parents by attempting to match the blood types. Can you help?

The four human blood types are A, B, AB, and O.

Type A dominates O, so those having type A have either AA or AO genes.

Type B dominates O, so those with type B have either BB or BO genes.

Type AB, neither gene dominates; one gene is A, one is B.

Type O is recessive to A and B, so its genes must be OO.

PARENTS

The McBrides = type O and AB

The Gonzales = type A and B

The Pepronis = type A and O

1. Who are the parents of baby A?
2. Who are the parents of baby B?
3. Who are the parents of baby C?

CHILDREN

Baby A is type AB

Baby B is type O

Baby C is type B
