

The Blood Connection

Answer the following questions that correspond with *The Blood Connection*.

# Patient-Donor Blood Connection

In the table below, fill in each patient’s phenotype, possible genotype, and what potential blood donations they can receive based on their blood type.

|  |  |  |  |
| --- | --- | --- | --- |
| **Patient** | **Phenotype** | **Genotype** | **Possible Blood Matches** |
| **Olive Mango** |  |  |  |
| **Domino Pickleman** |  |  |  |
| **Hamile Beets** |  |  |  |

**Punnett Square Parental Matching**

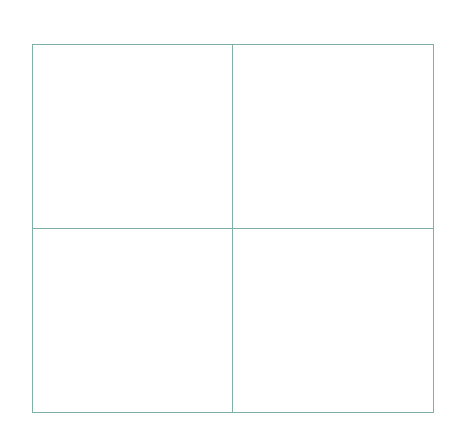
1. Zarria is homozygous for type B. Using the Punnett square below, show at least three combinations of genotypes her parents could be.

##### Parents’ Genotypes: Parents’ Genotypes: Parents’ Genotypes:

##### 

##### \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_

A picture containing shape

Description automatically generatedA picture containing shape

Description automatically generated

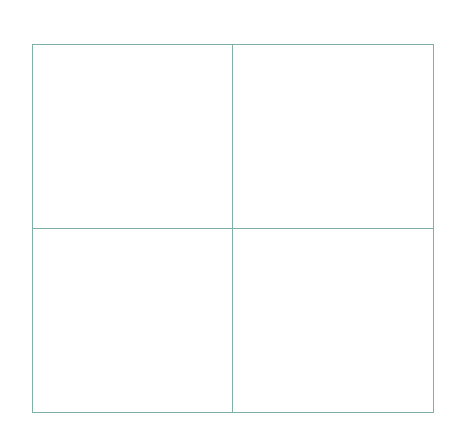
1. Zarria is heterozygous for type A. Using the Punnett square below, show at least three combinations of genotypes her parents could be.

##### Parents’ Genotypes: Parents’ Genotypes: Parents’ Genotypes:

##### 

##### \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_

A picture containing shape

Description automatically generatedA picture containing shape

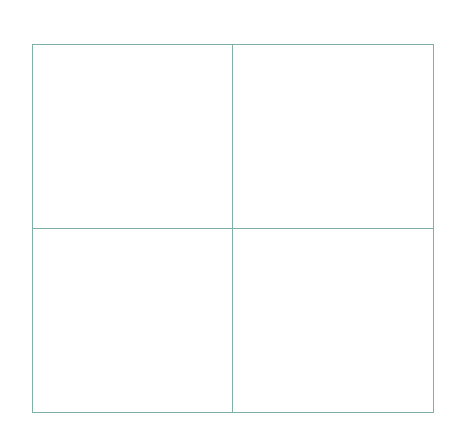
Description automatically generated

1. Zarria is blood type AB. Using the Punnett square below, show at least three combinations of genotypes her parents could be.

##### Parents’ Genotypes: Parents’ Genotypes: Parents’ Genotypes:

##### 

##### \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_X\_\_\_\_\_\_\_\_\_\_\_

A picture containing shape

Description automatically generatedA picture containing shape

Description automatically generated