**Worksheet\_3**

In humans, laugh dimples are dominant to no dimples. Also in humans, free ear lobe is dominant to attached ear lobe.

Laugh dimples

**dd (homozygous recessive) - D dimples (heterozygous or homozygous dominant)**

DD = laugh dimples

Dd = laugh dimples

dd = no dimples

Ear lobes

**ee attached ear lobe (homozygous recessive) E free ear lobe (heterozygous or homozygous dominant)**

EE = free ear lobe

Ee = free ear lobe

ee = attached ear lobe

1.  What are the phenotypes of persons that have the following genotypes:

Ddee \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ddEE  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ddee \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DdEe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.  A male person with the genotype **DDee** is crossed with a female person with the genotype **ddEe**. Fill the square out and determine the phenotypes the offspring.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **De** | **De** | **De** | **De** |
| **dE** |  |  |  |  |
| **dE** |  |  |  |  |
| **de** |  |  |  |  |
| **de** |  |  |  |  |

**How many out of 16 are:**

Laugh dimples, attached ear lobe   \_\_\_\_

Laugh dimples, free ear lobe \_\_\_\_

No dimples, attached ear lobe   \_\_\_\_

No dimples, free ear lobe \_\_\_\_

This worksheet was modified from:

<https://www.biologycorner.com/worksheets/genetics_2traits_bio2.html>

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