

Name: \_\_\_\_\_

A

Date: \_\_\_\_\_ Entry # \_\_\_\_\_

## DNA Coding: My DNA Pet

**Directions:** You will be given a new pet, but all you know about it is its DNA code. Use the DNA code to find out what your pet looks like. Sketch your pet at the bottom.

Each number has a piece of your pet's genetic code (DNA). This piece has the information for a certain gene (characteristic). Match the bases to make a strand of messenger RNA (mRNA). Each group of three bases on the mRNA forms a codon. The codon matches an amino acid. Use the table to find the correct amino acid from the mRNA codon. The amino acids join together to form a protein. The protein will determine which characteristic your pet has.

### I. Head Shape:

DNA strand: T A G G A T C C T

mRNA: \_\_\_\_\_

Amino Acids: \_\_\_\_\_

#### HEAD:

Ile, Leu, Gly



Leu, Ala, Glu



Ile, Pro, Arg



### II. Body Shape:

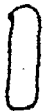
DNA strand: A C G A G T T A T

mRNA: \_\_\_\_\_

Amino Acids: \_\_\_\_\_

#### BODY:

Cys, Ser, His



Cys, Ser, Ile



Ser, Cys, Thr



III. Face:

DNA strand: C C A T G A G C T

mRNA: \_\_\_\_\_

Amino Acids: \_\_\_\_\_

FACE:

Gly, Thr, Arg

Ser, His, Arg

Gly, Thr, Trp



IV. Ears:

DNA strand: T T G G C T G A C

mRNA: \_\_\_\_\_

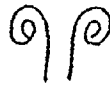
Amino Acids: \_\_\_\_\_

EARS:

Gln, Arg, Cys

Asn, Arg, Leu

Val, Ser, Phe



V. Legs/Feet:

DNA strand: C C C A A A G G G

mRNA: \_\_\_\_\_

Amino Acids: \_\_\_\_\_

APPENDAGES/LEGS/FEET:

Gly, Tyr, Cys

Asn, Leu, Ile

Gly, Phe, Pro



MY NEW PET: