Name	Class
Italio	Olabo

___ Date____

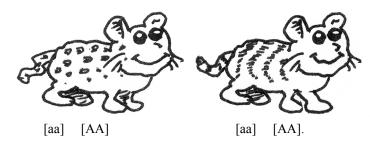
Conceptual Biology

Chapter 6: Inheritance

Dominant and Recessive Traits

1. Some small woodland creatures have either spots or stripes. Fur pattern is determined by a single gene. The striped phenotype is **dominant** and the spotted phenotype is **recessive**.

Both the woodland creatures shown below are homozygotes.



Phenotype is [spotted] [striped] [spotted] [striped].

2. The woodland creature below is a **heterozygote**. Does it have spots or stripes? Sketch the woodland creature's fur pattern and circle the genotype and phenotype.



Genotype is [aa] [AA] [Aa].

Phenotype is [spotted] [striped].

Fill in the blanks:

Genotype is

3. Here are two more woodland creatures. Which of the following must be a **homozygote**? Which could be either a **homozygote** or a **heterozygote**?



So we see that the spotted one must be a [homozygote] [heterozygote],

since you have to have two recessive alleles to have spots. The striped one is

[a homozygote] [a heterozygote] [either a homozygote or heterozygote].

