| Green Autosome | A. no chin spike B. nose spike C. three head flaps D. no visible ear hole E. [see * below] | a. chin spike b. no nose spike c. four head flaps d. visible ear hole |
|-------------------|--|---|
| Red Autosome | F. long neck G. no back hump H. no back spikes I. long tail J. flat feet | f. short neck g. back hump h. back spikes i. short tail j. arched feet |
| Orange Autosome | K. red eyes L. spots on neck M. [see + below] N. no fangs O. spots on back | k. yellow eyes l. no spots on neck n. fangs o. no spots on back |
| Yellow Autosome | P. no spots on thigh Q. green body R small comb on head [see ♠ below] S. [See ♣ below] T. [See ▶ below] | p. spots on thigh q. purple body r. large comb on head [see ≜ below] |
| Sex Chromosomes | U. regular thigh V. four toes W. no chest plate | u. pointed thigh v. three toes w. chest plate |
| X Chromosome Only | X. no. tail spike Z. long arms + non-fire breather | x. tail spike z. short arms - fire breather |
| Y chromosome only | Y. male sex | ine oreaner |

Codominant traits

★ E. eye pointed at each end
 ⊕ round eye
 Ee. eye round at front only
 ⊕ Ss. orange spots

Sex-influenced traits

 + M. wings

 m. no wings [dominant in presence of male hormone]

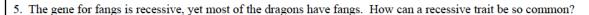
 ▶ T. no elbow spike

 t. elbow spike [dominant in presence of male hormone]

Sex-limited traits

 $\hat{\underline{\underline{}}}$ R or r Only males have the comb on the head.

| 1. What is Mendel's Law of Segregation? |
|---|
| Homologous Allele pairs Separate when gametes |
| 2. How does dropping the sticks and transcribing only 1 side of the stick model this law? |
| shows that ear parent only passes I of 2 |
| 3. What is Mendel's Principle of Independent Assortment? |
| 3. What is Mendel's Principle of Independent Assortment? Altele principle for differt genes SEPARATE Individual, 4. How does dropping the green, orange and red sticks illustrate this principle? **Control of Independent Assortment?** **Altele S **Altele |
| 4. How does dropping the green, orange and red sticks illustrate this principle? |
| shows traits on diff. chromosomes not |
| always linked. |
| 0 |
| |
| |
| |
| |



ble allele (rec.) is very common ingene pool

5. What is a "sex-linked trait"?

on X or y chimosome

6. Which traits are sex-linked? Refer to "Decoding the Dragon Genome.

- thigh shope - fail spike - # of toes - arm lungth - chest plate - fire-breathing

7 a. What traits are more likely to be found in males? [Consider sex-linked, sex-influenced and sex-limited traits.]

8 a. What traits are more likely to be found in females?

inted:

no fail spike

Long arms

no elbow spike

non-fire breathr linkel:

