## Mammal Hair

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## Characteristics of Mammals

- Warm-blooded
- · Have hair
- · Diverse teeth
- · Mammary Glands:
  - Produce milk to nourish young
  - Development?
- · High metabolic rates
- More mammalie things:
  - Single bone in lower jaw

- Three middle ear bones pengel@aacps.org



## External Structure & Locomotion

- 1. Skin- important for
  - A. protection from injury
  - B. invasion of bacteria
  - C. UV rays
  - D. temperature regulation
  - E. Sensory perception
  - F. Excretion
  - G. Water regulation

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- 2. Hair- keratinized strands of dead cells A. some it is reduced to a few bristles
  - B. 2 kinds make up the pelage or fur coat
    - 1. Guard hair- long outer hairs for protection & coloration
    - 2. Underhair- dense, soft, shorter hairs for insulation





- C. Stops growing when it reaches a certain length
- D. Molting
  - 1. all at once (most mammals) •Catastrophic molt in E. Seals (molt skin too)
- 2. gradually throughout life (humans)
- E. Important for:
  - 1. Camouflage
  - 2. Sensory perception
  - 3. Thermal regulation
- F. Hair color determined by the amount of a 6 pigment called melanin in the hair shaft

- 3. Claws- used for locomotion, offensive & defensive behavior
  - A. can be modified into:



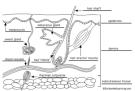
- 1. Claws- for digging
- 2. Nails- for grasping (arboreal animals-primates)



3. Hooves- reduced digits for walking on hard ground, rocks



- 4. Glands-variety of functions:
  - A. sebaceous (oil) glands- lubricates & waterproofs the skin



B. Sudoriferous (sweat) gland- cools skin; releases excess salt, urea, & water

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C. Scent/musk glands- on face, feet, anus to show territoriality, sex, recognition

- D. Mammary glands- secrete milk containing nutrients for young
  - •Modified sweat gland
  - •Fat infused sweat



C. Rhinoceros horn- mass of hair-like keratin fibers. Not bone





Poached for this bone.

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10