

Comparing Primate Dentition: Teachers Copy

Using the information below and the photographs on the following pages, classify and give the dental formulas for each of the following primates as either: primitive, prosimian, New World Monkey Old World Monkey, Ape, or Human.

TEETH:

Incisors; used for seizing, stripping, and puncturing
Canines; used in gripping and puncturing (size is larger in males)
Premolars & Molars; used for grinding

LOWER JAWS:

Rounded Angle: Apes and Humans
Sharp Angle: Primitive Primates and New and Old World Monkeys

DENTAL FORMULA

When calculating formula, count the number of teeth on one half of the jaw and multiply that number by two

UPPER JAW Incisors+Canines+Premolars+Molars x 2 = Total
LOWER JAW + Incisors+Canines+Premolars+Molars x 2 Number of Teeth

Upper& Lower Dental Formulas

PRIMITIVE PRIMATES 2143 x2= 40
PROSIMIANS 2133 x2= 36
NEW WORLD MONKEYS 2133 x2= 36
MARMOSSETS 2132 x2= 32
OLD WORLD MONKEYS 2123 x2= 32
APES
HOMO SAPIENS

In most primates the canine teeth are much longer than the other teeth. In humans the size of the canines are reduced and the ends are blunt. Short canines allow for increased side to side movement of the jaw

Dental Formulas and Primate Classification

- 1. _____ 2. _____
- 3. _____ 4. _____
- 5. _____ 6. _____
- 7. _____ 8. _____

What would the possible diet of #3 be?

What would the possible diet of #5 be?

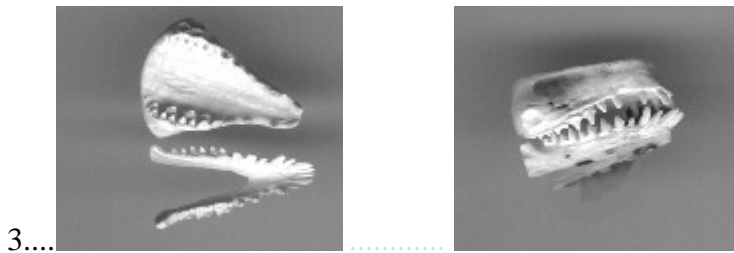
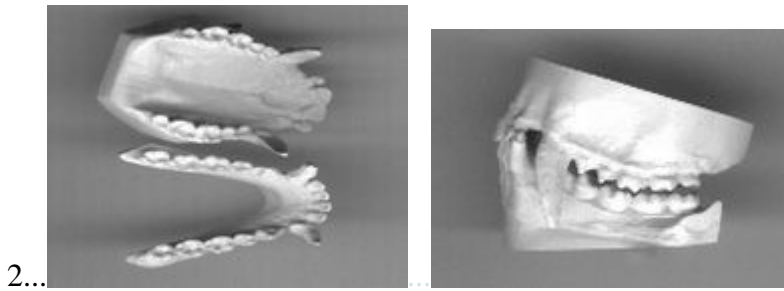
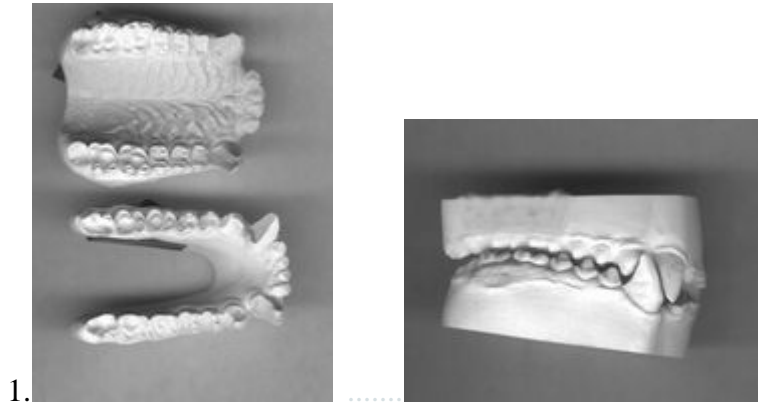
Describe the differences between the male and female of the following species #1:

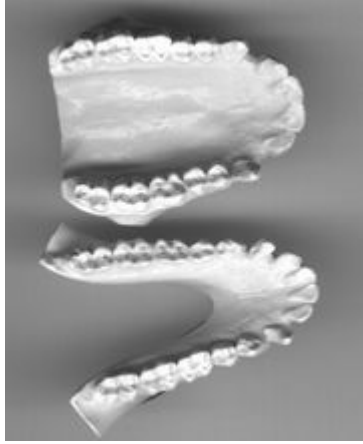
Describe the shape of the jaw (rounded, somewhat rounded, or sharp) for the following primates:

Ape _____ Human _____ Monkey _____

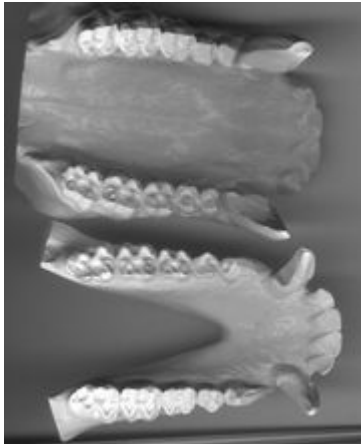
Suggest a reason why ape and human jaws are shaped the way they are and why monkeys have a slightly different shape.

Primate Dentition Photographs

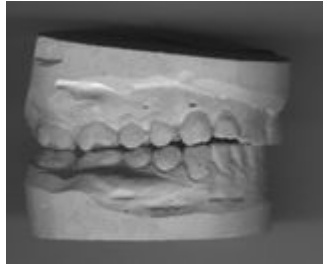
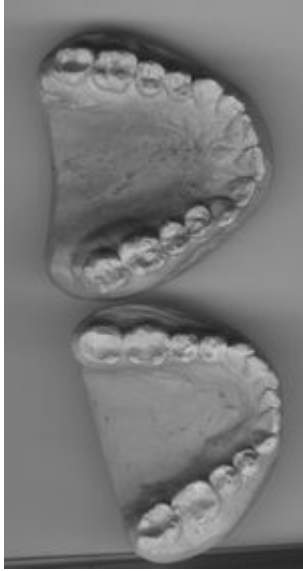




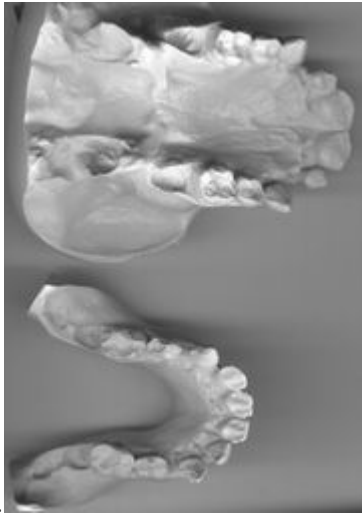
4.



5.

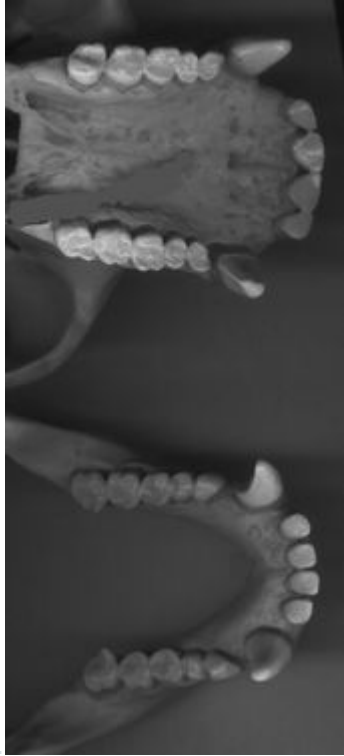


6.

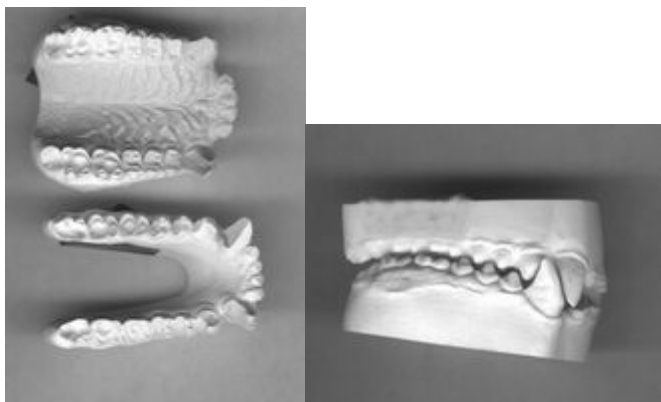


7.....

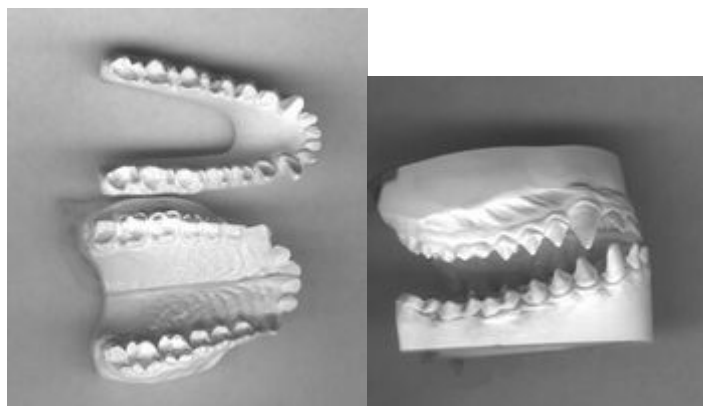
8.



Male Species #1



Female Species #1



Comparing Primate Dentition

Key

Species	Sex	Dental Formula	Category
1. Howler Monkey	Male	2133	New World Monkey
2. Gibbon	Female	2123	Lesser Ape
3. Tree Shrew	Male	2143	Primitive
4. Rhesus Monkey	Female	2123	Old World Monkey
5. Baboon	Male	2123	Old World Monkey
6. Human	Male	2122*	Homo Sapiens
7. Orangutan	Male	2122**	Ape
8. Chimpanzee	Male	2123	Ape

* Wisdom teeth removed

** Juvenile