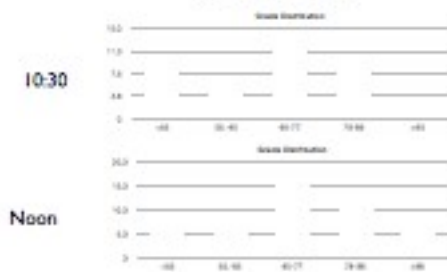


Midterm

E	50	
T	92	83%

Highs: Midterm 59, total 128.5
Midterm 53, total 123.5

Midterm



Current Percentages



Last time...

- Who are the modern primates?
- What are their two major divisions?
- What is the geographic range of living primates?
- What is the size range of living primates?

Primate evolution

- When did primates first appear in the fossil record?
- What are the epochs of the Cenozoic and what kinds of primates are found in each epoch?
 - What do we find in the Paleocene and where?
 - What do we find in the Eocene and where?

Strepsirrhines

- What are the characteristics that define the strepsirrhines?
 - Which are primitive to primates and which are derived?
- What are the different kinds of strepsirrhines? How do they differ?

Eocene primates

- What kinds of primates are found in the Eocene?
- What did they look like? What kind of environment did they live in?
- What "grade" of primates are found in the Eocene?
- Are these primates of the Strepsirrhine or Haplorhine lineage?

Lemurs

- Where do they live?
- How do they live?
- What are their identifying characteristics?



Lorises

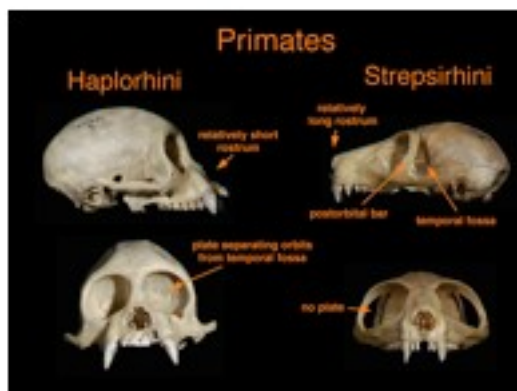
- Where do they live?
- How do they live?
- What are their identifying characteristics?



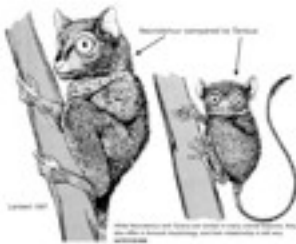
Primate Suborders

- Haplorhini vs. Strepsirhini
- Anthropoid vs. Prosimian
- What are the differences between these two ways of dividing the primates?

Traditional vs. Modern Taxonomy



Haplorhines



Tarsier

Suborder: Haplorhini
Infraorder: Tarsiiformes
Superfamily: Tarsioloidea



Tarsier

- nocturnal
- no rhinarium
- grooming claw
- carnivorous
- monogamous pairs
- no tooth comb

Tarsier Skull



Haplorhines



Anthropoids or Simiiformes (Infraorder of the Haplorhini)

- Monkeys, apes, and humans
- larger body size
- larger brain
- complete stereoscopic vision
- postorbital closure
- no rhinarium - reduced snout
- more complex social systems
- more parental care and longer development



	Epoch	Time Scale
Homo sp.	HOLOCENE	0-12,000 years ago
	PLEISTOCENE	100,000 years ago
Hominids	PLIOCENE	3-2 million years ago
	MIOCENE	23-5 million years ago
Apes	OLIGOCENE	33-23 million years ago
	EOCENE	55-33 million years ago
Monkeys	PALEOCENE	65-55 million years ago
Prosimians		
Proprimates		

Eocene continents



2

Oligocene Continental Arrangement



100 Ma
Early Oligocene

PLATE 1070
March 2007

3

Eosimias



4



5



20

Aegyptopithecus reconstruction



21

More Taxonomy



22

New World Monkey Origins?

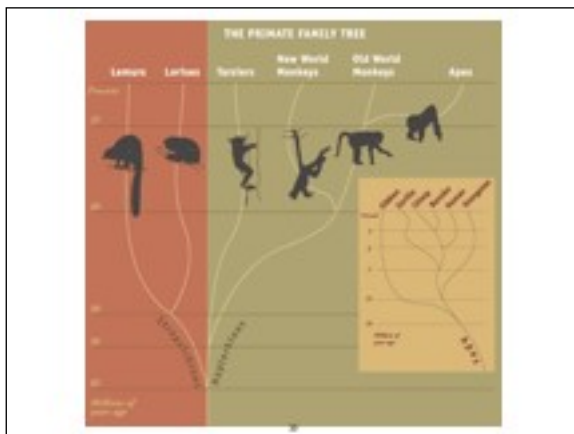
- molecular evidence suggests 2 lines split by 40 mya
- Earliest primates in S.America at 35-30 mya
- Source!
 - Eocene of North America?
 - Rafting! from Africa
 - supported by anatomical links to Apidium

23

Platyrrhini and Catarrhini (Parvorder?)

- **Platyrrhini**
 - New World
 - Flat noses
 - some prehensile tails
 - 2132/2133
- **Catarrhini**
 - Old World monkeys and apes
 - down noses
 - 2123

2



2

Superfamily: Ceboidea



2

Ceboidea Distribution



2

Capuchin



33

Squirrel monkey



34

Squirrel monkeys



35

Owl monkey



36

Owl monkey skull



37

Pitheciidea -Uakari



38

Titi Monkey



39

Titi Monkeys



40

Atelidae - Howler monkeys



41

Black howler



42

Spider monkey



43

Woolly Monkey



44

Muriqui



45

Muriqui



*

Superfamily: Ceboidea



*

Emperor tamarin



48



**Cotton-top
tamarin**



49

Golden Lion Tamarin



50

Twinning



51

**Pygmy
marmoset**



52

Silvery Marmoset



53

Common Marmoset



54

Living Primates



Figure 5.5 Taxonomy of the Haplorhines to the Family Level

55



56

Old World Monkeys

- Superfamily: Cercopithecoidea
- Family: Cercopithecidae
- 2 Subfamilies: Cercopithecinae and Colobinae

37

Cercopithecoidea Distribution



38

Vervet



39

Vervet monkey



Barbary macaque



61

Lion-tailed Macaque



62

Baboon



63

Mandrill



64

Japanese Macaque



65

Japanese Macaque



66

Colobinae: Hanuman langur

leaf eating monkeys
specialized stomach
bilophodont molars



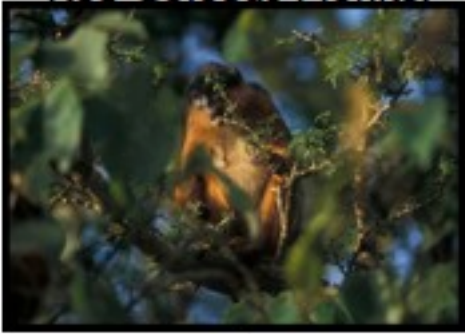
67

Douc Langur



68

Red Colobus Monkey



Black and white colobus



Proboscis monkey

