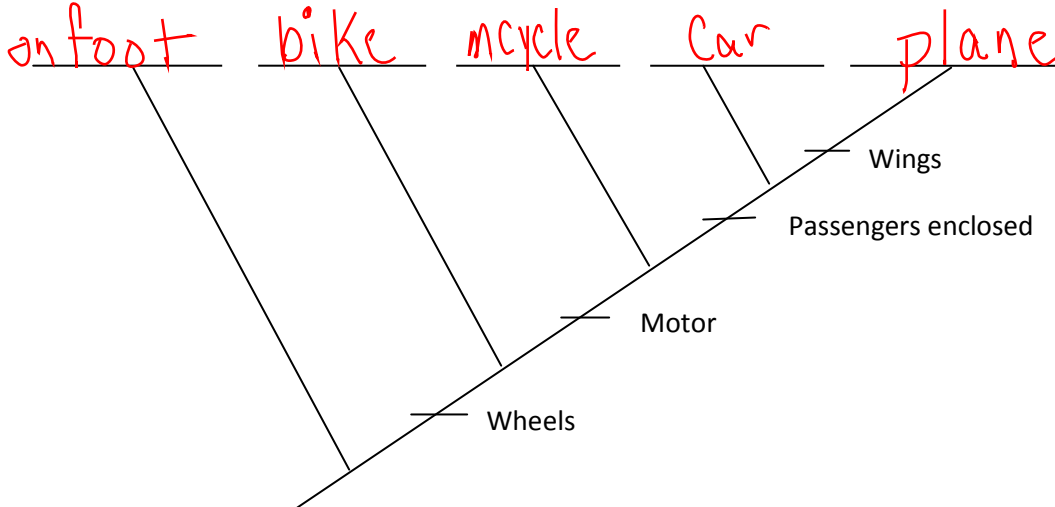


Answers

Cladogram Worksheet

Refer to pages 524-528 in your text book to help you as you create the cladograms below.

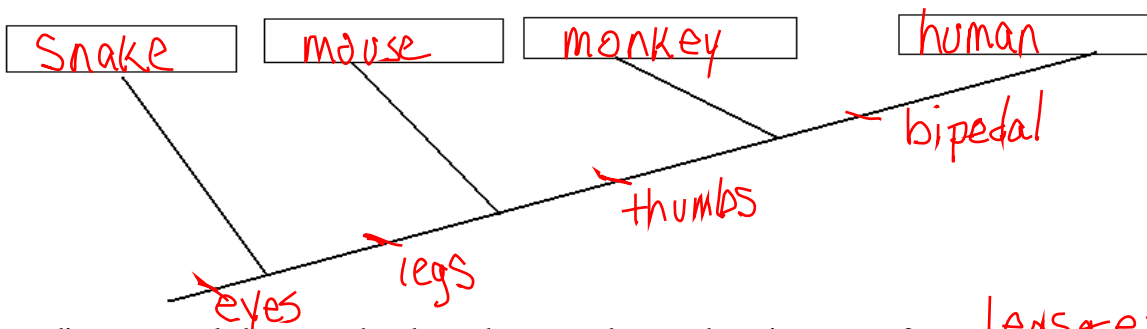
- Think about the characteristics of the following methods of transportation: bicycle, car, motorcycle, airplane, and on foot.
- Complete your cladogram by filling in each method of transportation on the appropriate line at the top.



- Examine the cladogram above. Which trait separates bicycles from airplanes, motorcycles, and cars? motor
- How many traits in common does the airplane and motorcycle have in common? 2
- What is the point where two object break away from each other called? new species - divergence
- Which mode of transportation may be considered an "outgroup" — a group that has none of the characteristics labeled on the cladogram? skis, riding a horse
- Fill in the following table. Mark an 'X' if an organism has each trait.

	Hair	Legs	Thumb	Eyes
Human	X	X	X	X
Snake				X
Monkey	X	X	X	X
Mouse	X	X		X

- Create your own characteristics to complete the cladogram below. Add each of these organisms to your cladogram below: human, snake, monkey, mouse.
- Be sure to label each branch of your cladogram with the proper characteristic.



- According to your cladogram, what does a human and mouse have in common? legs + eyes
- How many traits does the snake and mouse have in common? 1 (eyes)