Biology 3201 How to use a Dichotomous Key Gillam Holy Heart Name: \_\_\_\_\_\_

A dichotomous key is a tool that allows the user to determine the identity of items in the natural world, such as trees, wildflowers, mammals, reptiles, rocks, and fish. Keys consist of a series of "either or" choices that lead the user to the correct name of a given item. "Dichotomous" means "divided into two parts". **Therefore, dichotomous keys always give two choices in each step.** 

## Barbels are whisker like sensors near the mouth

		Classification Key for Common Freshwater Fish of New York State	
1)	Α	Body noticeably covered with scales	Go to 2
	В	Scales not covering body or too small to be seen	Go to 12
2)	Α	Dorsal fin single	Go to 3
	В	Dorsal fins two or more, joined or separated	Go to 6
3)	Α	Body more than four times as long as broad (top to bottom): front edge of dorsal fin far back on body; mouth large, hinge back of eye	Go to 4
	В	Body less than four times as long as broad: front edge of dorsal fin about midway between head and tail; mouth not large, hinge in front of eye	Go to 5
4)	Α	Dark lines forming netted design on body: fins not spotted	Pickerel
	В	Body covered with yellow spots; fins spotted	Northern Pike
5)	Α	Mouth turned downward: barbels absent; dorsal fin not elongated	White Sucker
-	В	Mouth not turned downward: barbels present; dorsal fin elongated	Common Carp
6)	Α	Two dorsal fins separated, the anterior spiny and the posterior soft	Go to 7
-	В	Two dorsal fins united, forming an anterior spiny portion and a posterior soft portion	Go to 8
7)	Α	Top of head concave, forming a hump in front of dorsal fin; dark vertical bars on body	Yellow Perch
	В	Top of head not concave, body sloping to dorsal fin and not forming a hump; dark blotches on body	Walleye
8)	Α	Body more than three times as long as broad	Go to 9
	В	Body less than three times as long as broad	Go to 10
9)	Α	Hinge of jaws behind the eye	Largemouth Bass
	В	Hinge of jaws below the eye	Smallmouth Bass
10)	Α	Mouth large, hinge below eye; sides flecked with dark spots	Rock Bass
	В	Mouth small, hinge in front of eye	Go to 11
11)	Α	Pectoral and pelvic fins sharply pointed; few or no stripes on face	Bluegill
	В	Pectoral and pelvic fins rounded; stripes on face	Pumpkinseed
12)	Α	Body much elongated and snakelike: dorsal, caudal, and anal fins continuous	American Eel
	В	Body not elongated and snakelike: dorsal, caudal, and anal fins separate; adipose fin present	Go to 13
13)	Α	Barbels growing from lips and top of head; head large and broad	Go to 14
-	В	Barbels lacking; head not large and broad	Go to 16
14)	Α	Caudal fin deeply forked; head tapering	Go to 15
	В	Caudal fin rounded or slightly indented but not forked: head blunt	Bullhead
15)	Α	Dorsal fin rounded at top: body silvery, speckled with black markings	Channel Catfish
	В	Dorsal fin long and pointed at top: body bluish-gray without speckles	Blue Catfish
16)	Α	Caudal fin forked: back with distinct dark spots	Atlantic Salmon
	В	Caudal fin square or slightly indented; back mottled or spotted	Go to 17
17)	Α	Back and caudal fin spotted: broad horizontal band along sides	Rainbow Trout
	В	Back mottled with dark lines: caudal fin not spotted; fins edged with white	Brook Trout



**EXTERNAL ANATOMY** 



Fish Name:



Fish Name: \_\_\_\_\_



Fish Name: