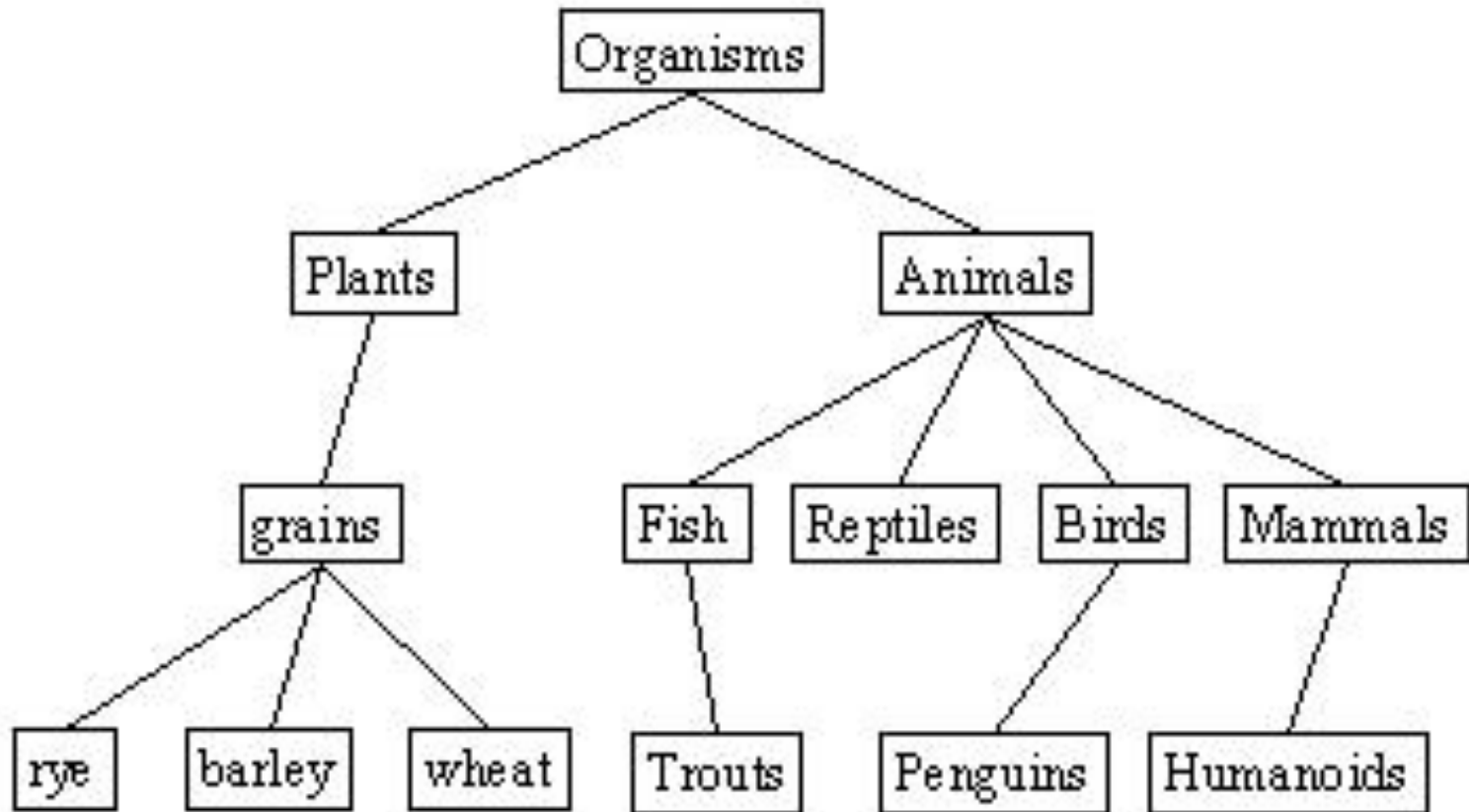


Classification Dichotomous Key Sample

What is a Dichotomous Key?



Sample Flow Chart



Dichotomous Key for the Classification of Common Fish

Directions:

- ▶ Always start at number 1.
- ▶ Each description has two choices.
- ▶ Read both 1a and 1b.
- ▶ Choose the description which best matches your organisms.
- ▶ Follow the directions to move to the next description.
- ▶ Each description will lead you to either another description or to the fish.



What kind of fish is pictured?



- ▶ 1a Body noticeably covered with scales **Go to 2
- ▶ 1b Scales not covering body or too small to be seen ** Go to 12

- ▶ 2a Dorsal fin single ** Go to 3
- ▶ 2b Dorsal fins two or more, joined or separated ** Go to 6

- ▶ 3a Body more than four times as long (front to back) as deep (top to bottom); the front edge of dorsal fin starts far back on body; the hinge of the mouth starts in back of eye ** Go to 4
- ▶ 3b Body less than four times as long (front to back) as deep (top to bottom); front edge of dorsal fin starts about halfway between head and tail; mouth not large, hinge of the mouth is in front of eye ** Go to 5

- ▶ 4a Dark lines forming netted design on body; fins not spotted. ** Pickerel
- ▶ 4b Body covered with spots; fins spotted ** Northern pike

- ▶ 5a Mouth turned down; barbels absent; dorsal fin not elongated ** White Sucker
- ▶ 5b Mouth not turned downward; barbels present; dorsal fin elongated ** Carp

- ▶ 6a Two dorsal fins separated, the anterior spiny and the posterior soft. ** Go to 7
- ▶ 6b Two dorsal fins united, forming an anterior spiny portion and a posterior soft portion **Go to 8

- ▶ 7a Top of head concave, forming a hump in front of dorsal fin; dark vertical bars on body ** Yellow perch
- ▶ 7b Top of head not concave, body sloping to dorsal fin and not forming a hump; dark blotches on body ** Walleyed pike

- ▶ 8a Body more than three times as long as broad ** Go to 9
- ▶ 8b Body less than three times as long as broad ** Go to 10

- ▶ 9a Hinge of jaws behind the eye; notch between spiny and soft dorsal fin deep and nearly separating into two fins ** Largemouth black bass
- ▶ 9b Hinge of jaws below the eye; notch between spiny and soft dorsal fin not nearly separating into two fins ** Smallmouth black bass

- ▶ 10a Mouth large, hinge below or behind eye ** Go to 11
- ▶ 10b Mouth small, hinge in front of eye ** Bluegill

- ▶ 11a Five to seven spines in dorsal fin; dark spots forming broad vertical bars on sides ** White crappie
- ▶ 11b Ten or more spines in dorsal fin; sides flecked with dark spots ** Rock bass (Redeye)

- ▶ 12a Body much elongated and snakelike; dorsal, caudal and anal fins continuous ** Eel
- ▶ 12b Body not elongated and snakelike; dorsal, caudal, and anal fins separate; adipose fin present ** Go to 13

- ▶ 13a Barbels growing from lips and top of head; head large and broad ** Go to 14
- ▶ 13b Barbels lacking; head not large and broad ** Go to 16

- ▶ 14a Caudal fin deeply forked; head tapering ** Go to 15
- ▶ 14b Caudal fin rounded or slightly indented but not forked; head blunt ** Bullhead catfish

- ▶ 15a Dorsal fin rounded at top; body silvery, speckled with black markings ** Channel catfish
- ▶ 15b Dorsal fin long and pointed at top; body bluish gray without speckles ** Blue catfish

- ▶ 16a Caudal fin deeply forked; back not mottled and with few spots ** Atlantic salmon
- ▶ 16b Caudal fin square or slightly indented; back mottled or spotted ** Go to 17

- ▶ 17a Back and caudal fin spotted; broad horizontal band along sides ** Rainbow trout
- ▶ 17b Back mottled with dark lines; caudal fin not spotted; fins edged with white ** Brook trout

Definition – Dichotomous Key

- ▶ a key used for the identifying organisms that is based on a series of choices between two alternative options.