

ORNITHOPTER (SOLUTION)

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Solvers should first identify the images in the Units section. Each pair of images refers to a group of organisms (i.e. taxon) which in this puzzle are as narrow as a genus or as wide as an order. The common names of these groups fit into the given blanks, and are in alphabetical order:

BIRDWINGS
 CRABS
 FLYCATCHER-SHRIKES
 FROGS
 HOUSE GECKOS
 MARSH ORCHIDS
 PLATYPUSES
 ROYAL FLYCATCHERS
 SWIFTS
 TRUE MANGROVES
 VELVET WORMS

While identifying the images, solvers may notice that 1) the scientific name for the given genus of birdwings, *Ornithoptera*, is close to the title of this puzzle, and 2) the scientific names for the above groups are all made of two Greek or Latin root words, and different groups have repeated root words. In fact, the scientific names can be arranged in a chain starting from *Ornithoptera*, with each successive name having one of its root words being the same as one of the root words of the previous name:

Scientific taxon	English root words	Common name
<i>Ornithoptera</i>	BIRD WINGS	Birdwings
<i>Ornithorhynchus</i>	BIRD SNOUT	Platypuses
<i>Onychorhynchus</i>	CLAW SNOUT	Royal flycatchers
<i>Onychophora</i>	CLAW TO BEAR	Velvet worms
<i>Rhizophora</i>	ROOT TO BEAR	True mangroves
<i>Dactylorhiza</i>	FINGER ROOT	Marsh orchids
<i>Hemidactylus</i>	HALF FINGER	House geckos
<i>Hemipus</i>	HALF FOOT	Flycatcher-shrikes
<i>Apus</i>	WITHOUT FOOT	Swifts
<i>Anura</i>	WITHOUT TAIL	Frogs
<i>Brachyura</i>	SHORT TAIL	Crabs

The number of repeated root words matches the number of sets of blanks in the “Parts” section, but the blanks do not match the lengths of the Greek/Latin roots. Solvers should use the translated English root words, and using the alphabetical order of the blanks to disambiguate between synonyms.

The 10 repeated English root words (in alphabetical order) are:

BIRD
 CLAW
 FINGER
 FOOT
 HALF
 ROOT
 SNOUT
 TAIL
 TO BEAR
 WITHOUT

With all the blanks filled in, solvers will extract the clue phrase **ABSENT UNIT, SAME AS PARTS**. As hinted in the flavortext, a “whole round” of units was actually derived. So the “absent unit” in the clue phrase refers to the missing unit (i.e. the common name for a group, like those from identifying the images in the first step) which would join the ends of the existing chain into a loop. The “same as parts” in the clue phrase indicates that the absent unit/common name for the missing group, also happens to be the same as the names of its parts (i.e. similar to birdwings/*Ornithoptera*). And in order to close the loop, the absent unit should comprised the unpaired parts **SHORT** (from crabs/*Brachyura*) and **WINGS** (from birdwings/*Ornithoptera*). Thus, the missing unit, and the answer to this puzzle, is **SHORTWINGS**, the genus of birds with a matching scientific name, *Brachypteryx*.