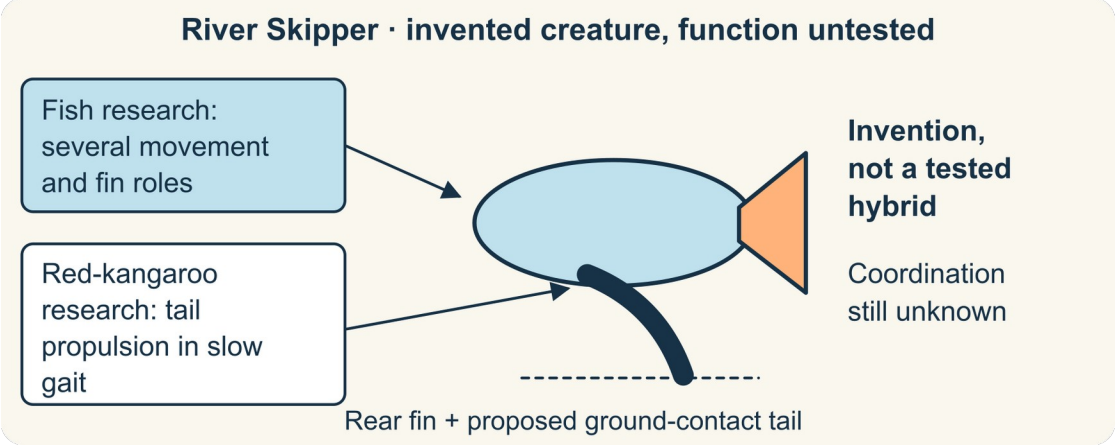
# Invent a creature with a labelled inspiration

## Which movement idea is researched and which part belongs to invention?

Design an imaginary creature while labelling what came from research and what is only an untested invention.

**Make | 15–25 minutes, or one comparison | Paper and a pen or pencil, The supplied model; no purchase, account or internet connection needed**

**Start here** Sketch an invented "River Skipper": an oval body, a side-to-side rear fin and a muscular tail that might contact the ground. Label the whole creature "invented; function untested".




Research is an inspiration, not a hybrid test

### 1 Read the two supplied research notes

The Florida Museum describes different ways fish propel and stabilise themselves, including body/tail motion. A red-kangaroo study measured a propulsive role for the tail during its slow five-part gait. These are different real cases.

### 2 Mark the borrowed ideas

Label rear-fin movement "inspired by fish locomotion" and proposed ground-contacting tail "inspired by the red-kangaroo study". These labels identify an inspiration, not evidence that a hybrid would work.

### 3 Add one invented feature

For example, give the creature broad folding fins. Explain their proposed purpose with "might". Write one unanswered question about support, movement or coordination; do not describe the proposal as an observed adaptation.

### 4 Keep the categories separate

Use three headings: researched statement, design invention, evidence still needed. The paper creature is complete as a labelled idea, even when its physical feasibility remains unknown.

# A research inspired drawing with honest labels

The River Skipper is original fiction; no animal was made, measured or observed for this activity.

• Research: some fish use body/tail movement in swimming. The museum also describes fins helping with stability and manoeuvring, so “all fins do the same job” would be inaccurate.

• Research: the cited red-kangaroo work concerns slow pentapedal locomotion; it does not establish a universal function for every animal’s tail.

• Invention: one creature combines a rear fin with a proposed ground-contact tail. Unknown: whether its structures, materials and movement could work together.

**What this example can show** A useful biological analogy is not proof of engineering feasibility, evolutionary history or real animal behaviour. Keep the inspiration’s species and movement context visible.

## A different way

Annotate the supplied creature with R for research and I for invention, or dictate labels to a scribe. There is no need for artistic skill, outdoor observation or animal handling.

## If you want to go further

Remove one proposed structure and explain which movement question changes. A paper redesign can test consistency of your explanation, not physical performance.

## Something to notice

Can a reader tell exactly which statement is researched and which part I invented?

## Read or explore more

Horizon topic Animal Movement

https://launchhorizonhq.com/learn/animal-movement/

Horizon topic Aquatic Movement

https://launchhorizonhq.com/learn/aquatic-movement/

Horizon topic Zoology

https://launchhorizonhq.com/learn/zoology/

Florida Museum of Natural History, University of Florida How Fish Swim

https://www.floridamuseum.ufl.edu/discover-fish/fish/how-fish-swim/

O’Connor and colleagues, Biology Letters; PubMed record The kangaroo’s tail propels and powers pentapedal locomotion

https://pubmed.ncbi.nlm.nih.gov/24990111/