

Selecting Functions

Thinking about the functions which best suit your challenge – in other words what does it need to *do* in order to be successful. Your Design Solution might have more than one Function.

Have a look at some of the terms below and **circle those which are most applicable to your Design.**

Move or stay put	Maintain physical integrity	Maintain Community	Modify	Make	Process Information	Breakdown	Get, store, or distribute resources
Attach	Protect	Coordinate	Modify Physical State	Generate / Convert Energy	Navigate	Chemically break down	Capture, absorb, filter
Move	Manage Structural Forces	Cooperate and Compete	Modify Chemical / Electrical State	Physically Assemble	Send Signals	Physically break down	Store
	Regulate Processes	Provide Ecosystem Services	Adapt/Optimise	Chemically Assemble	Process Signals		Distribute
	Prevent Structural Failure			Reproduce	Sense Signals		Expel
					Compute, Learn, encode/decode		

Next, turn this sheet over and use the functions you have circled to come up with some Research Questions.

Developing Research Questions

Turn the functions into Research Questions which nature can help you to answer. In other words, ask 'How does nature...'. You may need to be more specific than the functions overleaf, depending on the context in which your Design Solution will operate:

For example, if your function was Protect, and for your Design Solution you were particularly interested in protecting against the damaging UV rays of the sun, then a Research Question might be:

“How does nature protect itself from UV light?”

Have a go for up to three Functions:

Function 1:

How does nature...

Function 2:

How does nature...

Function 3:

How does nature...