

# Challenge Activities

## Ultimate Survivor Page 1

### Challenge: Design the Ultimate Reef Creature

Would an animal with a shark's body, jellyfish tentacles and stonefish camouflage be the ultimate survivor on a coral reef? Using what you already know, and the information on page 2, create your own Ultimate Reef Creature. Make sure to name your creation and list its adaptations in the boxes below, then draw what your creature would look like.

#### Animal Species Name:

Reproductive Adaptations:	Behavioural Adaptations:
Structural Adaptations:	Defence Adaptations:
Body Shape and Movement:	Feeding Adaptations:
Draw your creature here	

# Challenge Activities

## Ultimate Survivor Page 2

### Animal Adaptation Profile

Pick your favourite reef creature and tick the adaptations they possess from the list below.

### Animal Species Name:

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### Behavioural Adaptations

#### Living Arrangements

- Lives alone - solitary
- Lives with another animal, where both animals benefit (mutualism)
- Lives in a school or group
- Lives with another animal and doesn't cause them harm (commensalism)
- Lives with another animal and causes them harm (parasitism)

#### Reproductive Adaptations

- Spawning – release of eggs into the water currents (e.g. most reef fish)
- Laying eggs on land (e.g. turtles and birds)
- Laying eggs on the seafloor – (e.g. leopard sharks, damselfish, molluscs)
- Gives birth to live young (e.g. black tip reef sharks, stingrays)
- Budding / cloning (e.g. corals)
- Laying eggs in the parent's pouch or uterus, then producing live young (e.g. seahorses, tiger sharks)
- Sex change (e.g. parrot fish, groupers, coral trout and wrasse change from female to male, while clown fish change from male to female)

### Structural Adaptations

#### Feeding

- Strong beak to scrape hard surfaces – e.g. *parrotfish*
- Tubular mouth to suck small food out of holes – e.g. *butterflyfish*
- Small mouth and large eyes to prey upon plankton – e.g. *anemonefish*
- Large mouth with rows of sharp teeth - e.g. *shark*
- Rasping tongue to scrape algae from rocks – e.g. *sea snail*
- Large mouth to take in water and siphon out food – e.g. *whale shark, manta ray*
- Feather-like feeding tentacles to filter food from the water – e.g. *tube worms, feather stars*

#### Defence

- Toxic body tissue / organs
- Stripes or false eyespots
- Warning colouration
- Size
- Colour / camouflage
- Speed
- Venomous spines or bite
- Hiding

#### Body Shape

- Fusiform e.g. *tuna, shark*
- Anguilliform e.g. *eel*
- Depressiform e.g. *ray*
- Compressiform e.g. *butterflyfish*