

Cheat sheet of common animal adaptations

Ideas to get students started if required

Physical adaptations

Camouflage

- Snow leopard: spotted fur blends into snow and rocky terrain

Protective coverings

- Turtles: hard shells protect from predators and the environment
- Scorpions: exoskeleton protects from physical damage and dehydration

Body changes

- Parrots: beaks have increased surface area to maximise heat loss
- Dragonflies: darker-coloured dragonflies have become lighter to reduce heat absorption from the sun
- Caribbean lizard: larger toe pads and front legs improve grip during intense storms

Behavioural adaptations

Migration

- Monarch butterflies: move from North America to Central Mexico to avoid winter and find better breeding conditions

Hibernation

- Ground squirrels: hibernate in burrows during colder weather and when food is scarce

Nocturnal

- Rats: urban rats are nocturnal, searching for food when fewer humans are active

Social

- Meerkats: live in social groups, taking turns standing guard against predators

Reproduction

- Tree swallows: shifted nesting times earlier to avoid hotter temperatures

Diet (typically due to changes in temperature)

- Kodiak brown bears: earlier warm weather triggers earlier berry harvesting and less salmon eating

Plant adaptations

(If groups are REALLY interested in plant adaptations over animal adaptations)

- Changing the shape of stems and leaves to make plants more resistant to high temperatures
- Warmer temperatures can cause earlier flowering or fruiting, disrupting synchrony between plants and their pollinators
- Fleshy leaves store more water (e.g. Sea Purslane)
- Hairy leaves shade and protect plants from extreme light and temperature (e.g. Bay Lavender)
- Deeper roots provide better access to water (e.g. Sea Oats)