Marwell Wildlife

# KS2 Adaptation Trail

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The Adaptation Trail is a journey of discovery through Marwell which allows students to develop and apply their knowledge and understanding of 'adaptation'. It follows the main route around the zoo, taking in twelve species from a range of habitats; this provides students with the opportunity to see and consider a range of adaptations. The route of the trail will pass toilet blocks and there is a picnic site and café approximately half way round to allow for a break or for lunch.

Students can use the information provided on signs, some picture clues on trail sheets and their own observations to complete their worksheets.

There is an answer sheet for teachers at the end of this pack.

# Curriculum Links

**SCIENCE**
**Year 6 Evolution and inheritance**

• identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution

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**Name** _____

**School** _____

# Adaptation Trail

## Welcome to Marwell Zoo!

You are about to go on a journey of discovery around the zoo to find out more about how different animals are suited to their environment. First, let's make sure that you know what these words mean: match up the word and what it means using a line.

| | |
|---|---|
| **camouflaged** | This is the environment (place) where an animal or plant lives. |
| **predator** | This means that the animal can blend into its surroundings. |
| **prey** | This means that the animal/plant has features that help it to live in its habitat. |
| **habitat** | These are animals that are eaten by other animals. |
| **adapted** | These animals eat other animals. |

On your journey around the zoo, you will meet some amazing animals and have some challenges to complete on your way. Some of the information you will need is on signs on the enclosure; sometimes you have to watch the animal and look at the photos and picture clues to work out the answers.

## 1. HUMBOLDT PENGUIN

What habitat does it live in? _____

_____

What are their wings like? _____ ___

What other features help these birds to live in their habitat?

_____

_____

_____

_____

_____

## 2. CHEETAH

What type of habitat does it live in? _____

_____

Can you spot this pattern on the cheetah?

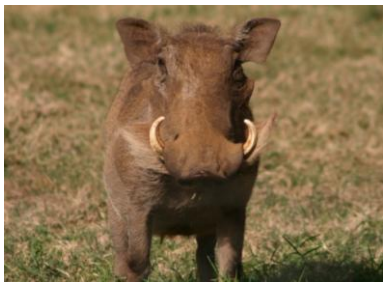
How might this pattern be useful to cheetah?

_____

_____

_____

## 3. WARTHOG



The habitats it lives in are

_____

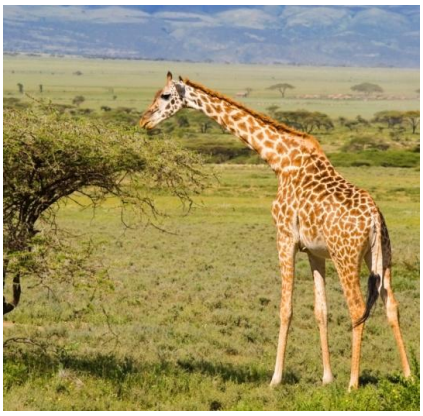
_____

Give two reasons why warthogs have sharp tusks.

1. _____

2. _____

## 4. GIRAFFE



This is the tallest animal in the world!

What habitat does this animal live in?

_____

What adaptations does it have that make it into the tallest animal?

_____

_____

Give two reasons why being so tall is useful for a giraffe.

1. _____

2. _____

A giraffe's tongue is 46-50cms long. How does this help it?

_____

_____

## 5. AMUR TIGER

What habitat does it live in?

_____

What do you think the weather is like there?

_____

What does this animal have to keep it warm?

_____

How does it stay camouflaged?

_____

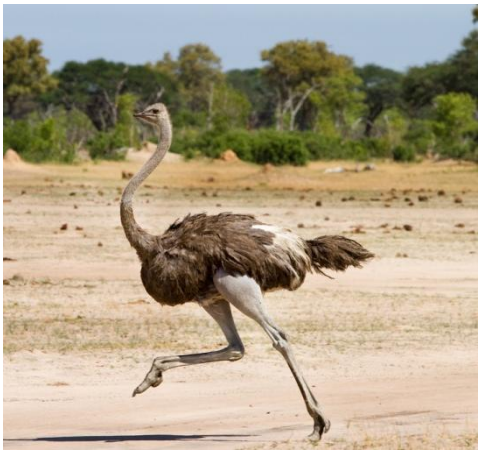
Why does the tiger need to hide in the wild?

_____

## 6. OSTRICH

What habitat does it live in? _____

Do you think it would be well camouflaged there? _____

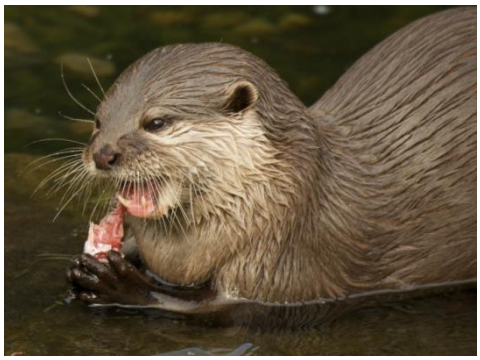


Look at how long the ostrich's legs are. How do you think these long legs help it to survive? _____

_____

_____

## 7. ASIAN SMALL-CLAWED OTTER



What type of habitat does it live in?

_____

_____

Name two features that help it to live there:

_____

_____

_____

## 8. SIAMANG GIBBON

In which type of habitat can it be found? _____

What adaptations does it have to help it move through the trees easily?

_____

_____

_____

_____

_____

_____

_____

## 9. SNOW LEOPARD

What type of habitat does it live in? _____

Look at this animal. What three adaptations help it to live in its habitat?

1._____

It helps to_____

2._____

They help it to _____

3._____

This helps it to balance.

## 10. LOWLAND TAPIR

What habitat does this animal live in: _____

What type of food does this animal eat? _____

What two adaptations can you see that would help it to feed?

1._____

It helps because _____

2._____

These help because _____

_____

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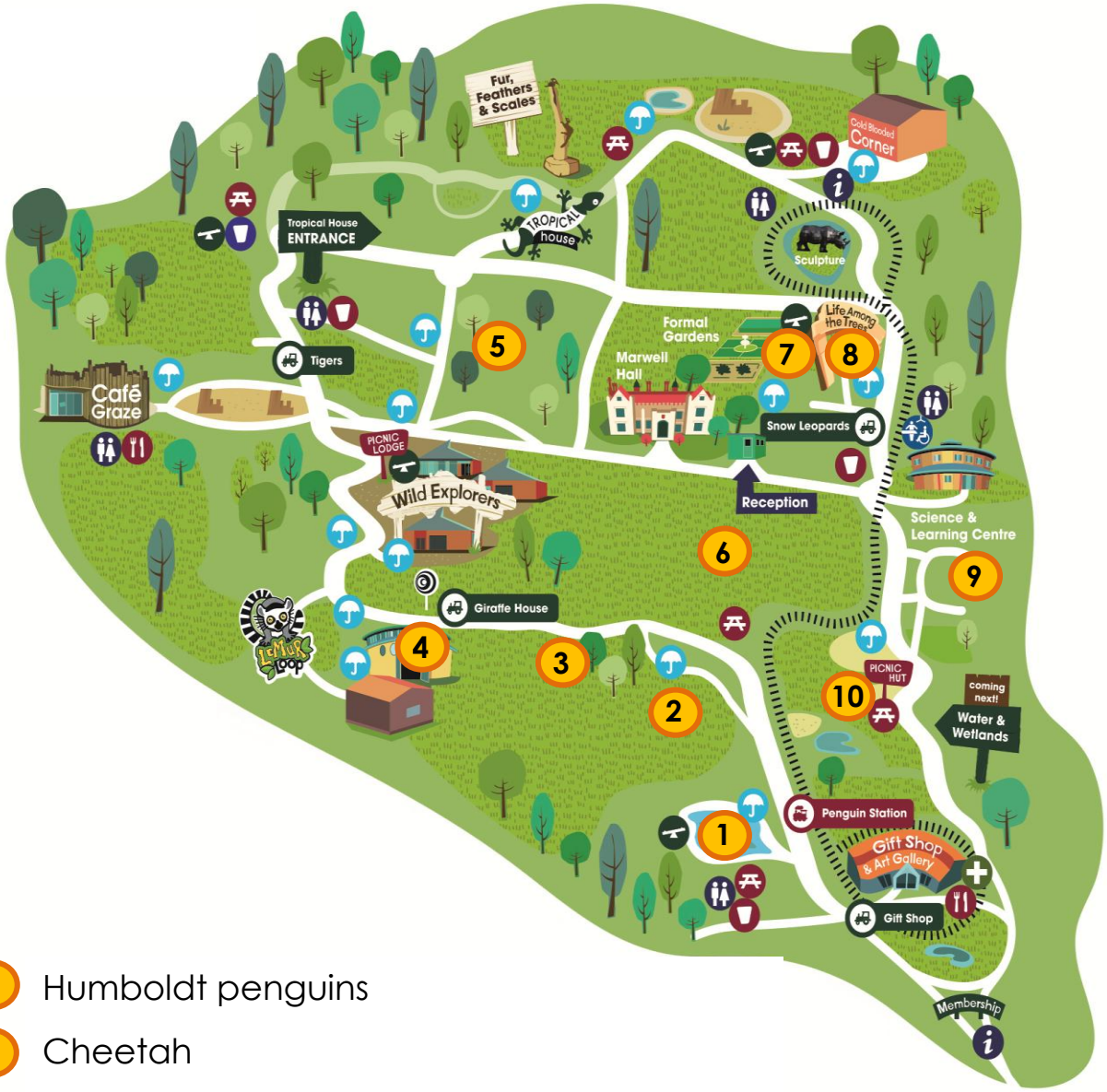
# Animal Locations




1. Humboldt penguins
2. Cheetah
3. Warthog
4. Giraffe
5. Amur tiger
6. Ostrich
7. Asian small-clawed otter
8. Siamang gibbon
9. Snow leopard
10. Lowland tapir

## Adaptation Trail answers

**1. Humboldt penguin:** Habitat: Rocky coasts and cool waters.
Wings: Act as flippers to help them swim.
Other features: Mouth has small spines to keep hold of fish; waterproof feathers; streamlined body; camouflage.

**2. Cheetah:** Habitats: Savannah, scrub and open woodland. Pattern useful for: Camouflage – helps them to hide from their prey in savannah grasses.

**3 . Warthog:** Habitats: Grasslands and open woodland.
Reasons for tusks: To use as weapons when protecting themselves from predators or when competing with each other (males).

**4. Giraffe:** Habitat: Savannah or dry, open country and woodland.
Features to make it tall: Long legs and long neck.
Two reasons: Help it to reach food; can see danger.
Tongue: Can grab and pick leaves to eat.

**5. Amur tiger:** Habitat: Woods and forests.
Weather: Very cold in winter, quite warm in summer.
To keep warm: thick fur (cools off in water during warm summers).
Camouflage: Stripes blend in with trees.
Hiding from prey: wild pigs, deer, antelope and smaller animals.

**6. Ostrich:** Habitat: Desert and savannah.
Camouflage: Yes.
Long legs: to run quickly (up to 70km per hour!) and also kicking for defence.

**7. Asian small-clawed otter:** Habitat: Rivers, creeks, marshes, coastal wetlands, mangroves and rice fields.
Features: Long bodies, short limbs, long tails, partially webbed feet to help them move through the water.

**8. Siamang gibbon:** Habitat: Tropical rainforest.
Features: Long arms for swinging; long fingers to grip branches; forward facing eyes to judge distances.

**9. Snow leopard:** Habitat: Cold mountains.
Adaptations: Thick fur to protect against the cold; large paws to move easily through snow; strong legs/paws to catch prey and move easily through rocky areas; long tail to help with moving through rocky areas; furry tail can be wrapped over the face to keep it warm when resting; large teeth for killing and eating prey.

**10. Lowland tapir:** Habitat: Rainforests, grasslands and wetlands.
Diet: palm fruits, leaves, lianas, reeds and bark.
Adaptation and reasons: long fleshy nose (proboscis) which is prehensile, so they can use it to grasp food; long slender legs and three toed feet which spread their weight on soft ground to aid balance and stop them from sinking when reaching for food in marshy areas. Tapirs can reach food up to three metres from the ground by standing on their hind feet and reaching up with their proboscis to pick leaves and fruit.