



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

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. Serval

What type of habitat does it live in? _____

What do you notice about the Servals ears and legs compared to its body size? _____

How might having this adaptation be useful for hunting in the wild?



3. Plains Zebra



The habitats it lives in are _____

Give a reasons why Zebra have stipes.

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 _____





**Marwell
Wildlife**

Animal Locations



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



* Open for special events
and private bookings



* Open for pre-booked education
groups or special events

Information subject to change. 08/21.

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. Serval: Habitats: Savannah, scrub and open woodland.

Legs and ears: Are very large for their body size.

Why?: The long legs are used for jumping (2-3m high – they can catch birds in the air and leap on their prey) ears are to hear their prey moving in the long grass.

3 . Plains Zebra: Habitats: Grasslands and African Savannah

Reasons for stripes: Camouflage – stripes break up the outline of an animal and them to blend in with in grass and shadows.

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.