



**Marwell  
Wildlife**

# KS1 Fur, Feathers & Scales Activity Pack

## KS1 Fur, Feathers and Scales

This pack is based around the Fur, Feathers and Scales area of Marwell Zoo, from the Walkthrough Aviary to Cold Blooded Corner. In this part of the zoo, the interpretation has been themed on the topic of classification for younger guests.


Activity ideas aim to encourage observation and discussion and are intended for use by a teacher or adult helper with a small group of children. The activities explore the features of and differences between the different animal species and between the vertebrate groups of birds, mammals and reptiles. We have used some Makaton and Communicate in Print symbols throughout the pack.

Please pick and choose from the activities as you wish, but as a minimum you will probably want to look at the three main interpretation boards:

- 'Birds' in the Walkthrough Aviary,
- 'Mammals' near the Coati enclosure, and
- 'Reptiles' on the outside wall of Cold Blooded Corner

This pack has three sections for fur (mammals), feathers (birds) and scales (reptiles). If you want to see some amphibians and fish to include in your classification of vertebrates, you will find some of each in Tropical House.

Each of the first three sections has:

- a teacher page with information and questions for the pupils to focus them and start discussions
- at least one pupil activity page, some to do at the zoo and some which they could do anywhere
- the symbol  refers to the interpretation panels with spinning sections

The final, and fourth, activity gives pupils a chance to sort out some mammals, birds and reptiles into groups.

The animals may not always be visible, so do not worry if you do not see them all. If you have time, it may be worth popping back later to see if the animals reappear.

## Curriculum Links

### SCIENCE

#### Working scientifically

- identifying and classifying

#### Year 1 Animals, including humans

- identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals
- describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)




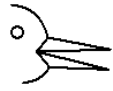


## Walkthrough Aviary Teacher Sheet

Use the large signs in the open barn at the top of the aviary.

**These are all birds...** 

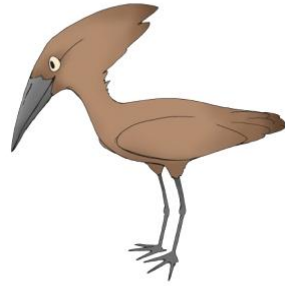
The spinners on the sign look at four features which birds all have: wings, eggs, beaks and feathers. Spin them round and you will find out that the one feature which ONLY birds have is FEATHERS.

Topic	Talk About: questions and activities	Examples and Answers
Nests 	<ul style="list-style-type: none"> <li>• How many nests can you see?</li> <li>• What did the birds use to make the nests?</li> <li>• What will happen in the nest?</li> </ul>	Grass, leaves, twigs  Eggs will be laid, and chicks hatch out!
Feathers 	<ul style="list-style-type: none"> <li>• If you have found and picked up any loose feathers, which part of the bird did they come from?</li> <li>• Do any of the birds you can see have feathers which might be used for display (or showing off)?</li> </ul>	Use the signs to help  Little egrets & hamerkop have crest feathers on their heads
Webbed Feet 	<ul style="list-style-type: none"> <li>• Spread out your fingers and imagine skin between them to push the water.</li> <li>• Which of the Walkthrough Aviary birds has webbed feet? (Look at the signs if you can't see the birds).</li> <li>• Can you think of any other birds that have webbed feet?</li> </ul>	Madagascar teal  e.g. ducks, geese, seagulls, penguins
Beaks 	<ul style="list-style-type: none"> <li>• What shape beaks do the birds have that you can see? Long or short? Straight or curved?</li> <li>• What do you think they eat?</li> </ul>	Use the signs to help



## Walkthrough Aviary – Activity Sheet

### Spot the Species



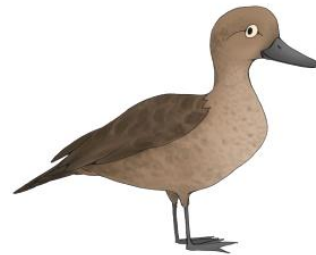
Hamerkop



Northern bald ibis



Little egret



Madagascar  
teal



Village  
weaver bird



Crowned lapwing

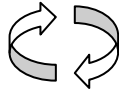
**Have any of the birds built nests?**

**Yes / No**





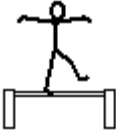
## Red Panda Teacher Sheet

### These are all mammals...



The spinners on the sign look at 3 features which mammals all have: fur, live babies and milk. "Live babies" means that mammals are the only group of animals who DO NOT LAY EGGS. "Milk": the mothers feed their babies on milk which they make in their own bodies.

The activity sheet concentrates on fur, and there are some other questions below about the red pandas.

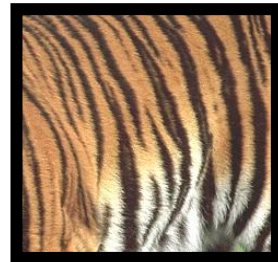
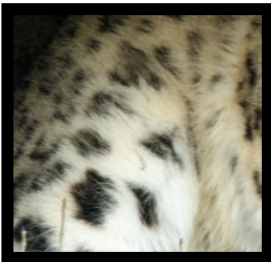
Topic	Talk About: questions and activities	Examples and Answers
Fur 	<ul style="list-style-type: none"> <li>• What do you think fur is for? How does it help an animal to have fur?</li> </ul>	To keep warm. Keeps a dry layer of warm air next to the skin. Keeps water away from the skin. Blocks sunlight. Can be patterned for camouflage.
Feeding 	<ul style="list-style-type: none"> <li>• Find out what red pandas eat from the sign.</li> </ul>	
Balance 	<ul style="list-style-type: none"> <li>• If people try balancing on ropes or narrow beams, they use their arms out at the side to help them balance. What do red pandas use to help them balance?</li> <li>• You can try out your balancing skills in the small playground near the Siamang gibbon enclosure.</li> </ul>	Tails



## Fur on Mammals - Activity Sheet

Which mammals do you think these fur pictures come from?

Draw lines to join the fur to the whole animal it comes from, then to the name.



tiger

snow leopard

wallaby

giraffe

Can you find the fur on these mammals?



hippo



warthog

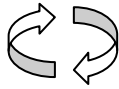


rhino



## Cold Blooded Corner Teacher Sheet





**These are all reptiles...**



The spinners on the sign focus on three things that most\* reptiles have in common: they lay leathery eggs, are cold blooded, and have dry scales.

Cold blooded animals cannot keep their inside body temperature warm themselves, so they have to move into the sun or be in a heated enclosure. Birds and mammals are warm blooded; reptiles, amphibians and fish are cold blooded.

(\*There are some snakes that are viviparous, where the eggs are retained in the mother's body, hatch out inside and the babies are born without eggs.)


Topic	Talk About: questions and activities	Examples and Answers
Leathery eggs 	<ul style="list-style-type: none"> <li>Most reptiles hatch out from leathery eggs, softer than the shells of bird eggs.</li> <li>Where do reptiles lay their eggs?</li> </ul>	Actually boas (like the ones in Cold Blooded Corner) are viviparous (see above).  Reptiles lay eggs on land, sometimes buried in sand (tortoises and turtles). Compare with amphibians and fish which lay their eggs in water.
Dry scales 	<ul style="list-style-type: none"> <li>Look for the scales on the bodies of the snakes, lizards and tortoises.</li> <li>Draw a sample of the patterns they make.</li> <li>Do they have any fur or feathers as well?</li> <li>Do they look slimy or sticky?</li> </ul>	Look like roof or bathroom tiles.  No fur or feathers!  No, but the snakes are sometimes shiny, not slimy.
Bones 	<ul style="list-style-type: none"> <li>Do snakes have bones? Look at the big Burmese python skeleton in one of the enclosures.</li> <li>What would your body be like if you didn't have bones? Act it out.</li> </ul>	Yes, all reptiles have bones.
Venom 	<ul style="list-style-type: none"> <li>The snakes in this building are not venomous (do not inject toxic venom with their teeth). How do they kill the animals they eat?</li> <li>The beaded lizard and the Gila monster are both venomous. How would this be useful to them?</li> </ul>	They are constrictors, i.e. they wrap their body around the prey animal and squeeze so that it cannot breathe.  To defend themselves and to kill their prey before they eat it.



## Cold Blooded Corner – Activity Sheet

Here are some animals from Cold Blooded Corner:



1. Egyptian tortoise 




2. Gila monster 




3. Beaded lizard 




4. Madagascan tree boa 





5. Dumeril's ground boa 







6. Emerald tree monitor 

*Emerald tree monitor?*



Answer the questions by putting the animals' numbers in the boxes. Some numbers go in more than one box!


	Which snake lives in trees?		
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	Which snake lives on the ground?		
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	Which snake comes from Madagascar?		
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	Which are the lizards from Mexico?	
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	Which lizards eat eggs as part of their diet?		
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Which animal has a shell for protection?		
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## Fur, Feathers and Scales Sorting

Decide which group each of the animals in the pictures belongs in – by ticking or by cutting out and sorting.

fur



feathers



or scales



?

