

# Discovery Challenge

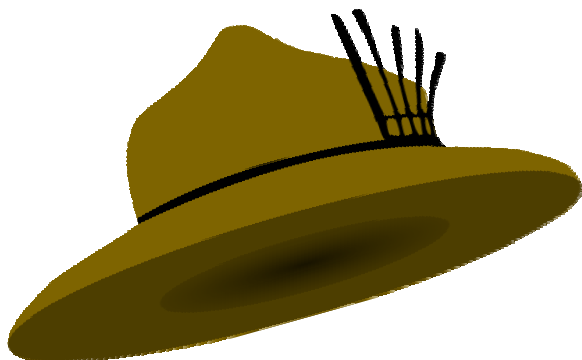
## Learn About Animals

### Part 3



*An animal has been made by God just as you have been. He is therefore a fellow creature. He has not the power of speaking our language, but can feel pleasure or pain just as we can and he can feel grateful to anyone who is kind to him. A Scout is always helpful to people who are crippled or blind or deaf and dumb; so he is good also to these dumb fellow-creatures of ours.*

**Sir Robert Baden-Powell**





# Animal Index



## **Animal Categories**

### **Cold or Warm Blooded?**

### **Factsheets & Activities**

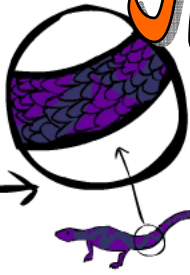
- **Albatross**
- **Badger**
- **Bee**
- **Butterfly**
- **Cheetah**
- **Dwarf Crocodile**
- **Komodo Dragon**
- **Kookaburra**
- **Macaw**



# Different Types of Animals

## REPTILES

- have scales, not fur.
- they have dry skin.



- usually lay eggs, sometimes live young
- cold-blooded.

## MAMMALS

- give birth to live young?



- have hair or fur



- mammal mothers nurse their young with milk.
- warm-blooded

## BIRDS

- have feathers & wings
- lay eggs



- warm-blooded

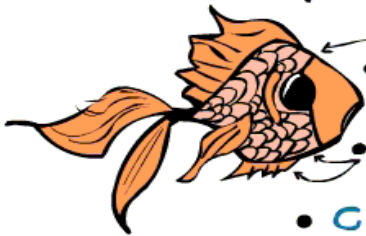


## INSECTS

- Have head, thorax, and abdomen
- Have legs, two antennae and 2 eyes
- Some Insects have wings



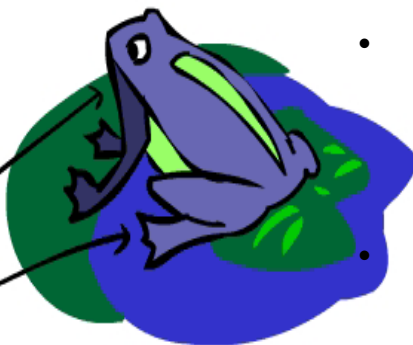
## FISH



- breathe underwater using gills.
- have scales and fins.
- cold-blooded.
- lay eggs.

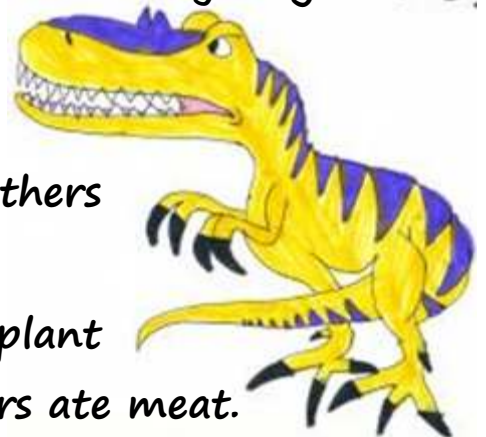
## AMPHIBIANS

- live on land & in water.
- cold-blooded.
- lay eggs.
- moist skin.
- webbed feet.



## EXTINCT - DINOSAURS

- Dinosaurs lived a very long time ago
- Some had horns and others had wings
- Some were plant eaters, others ate meat.
- They laid eggs

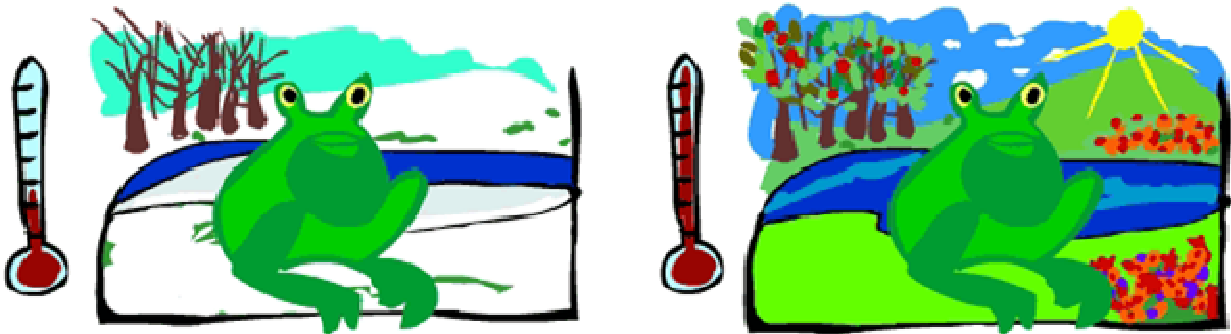


# COLD BLOODED

Cold-blooded animals, like reptiles, amphibians, and fish, become hotter and colder, depending on the temperature outside.

For example, when the sun sets at night, their bodies are cooler because it is less warm outside. When the sun is out, however, their bodies soak up the heat and become warmer.

## Cold-blooded ANIMALS

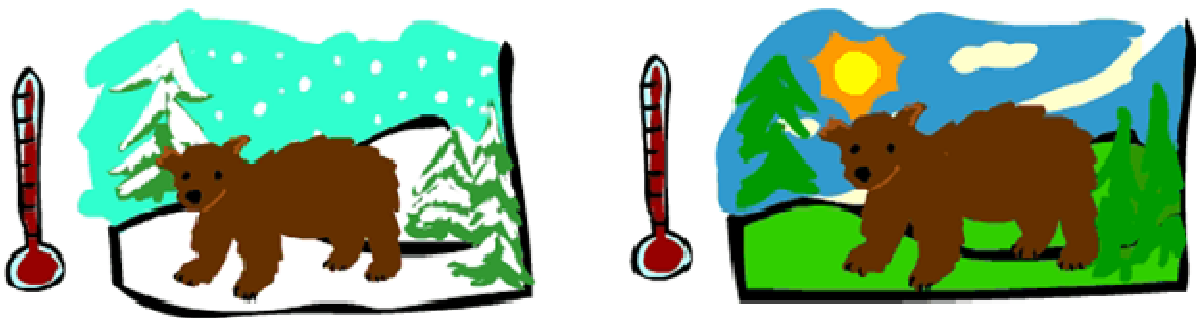


Body temperature depends on whether it's cold or hot outside.

# WARM BLOODED

Mammals and birds are warm-blooded, which means that they can make their own body heat no matter the external climatic conditions. In fact warm-blooded animals have body temperatures that usually stay the same.

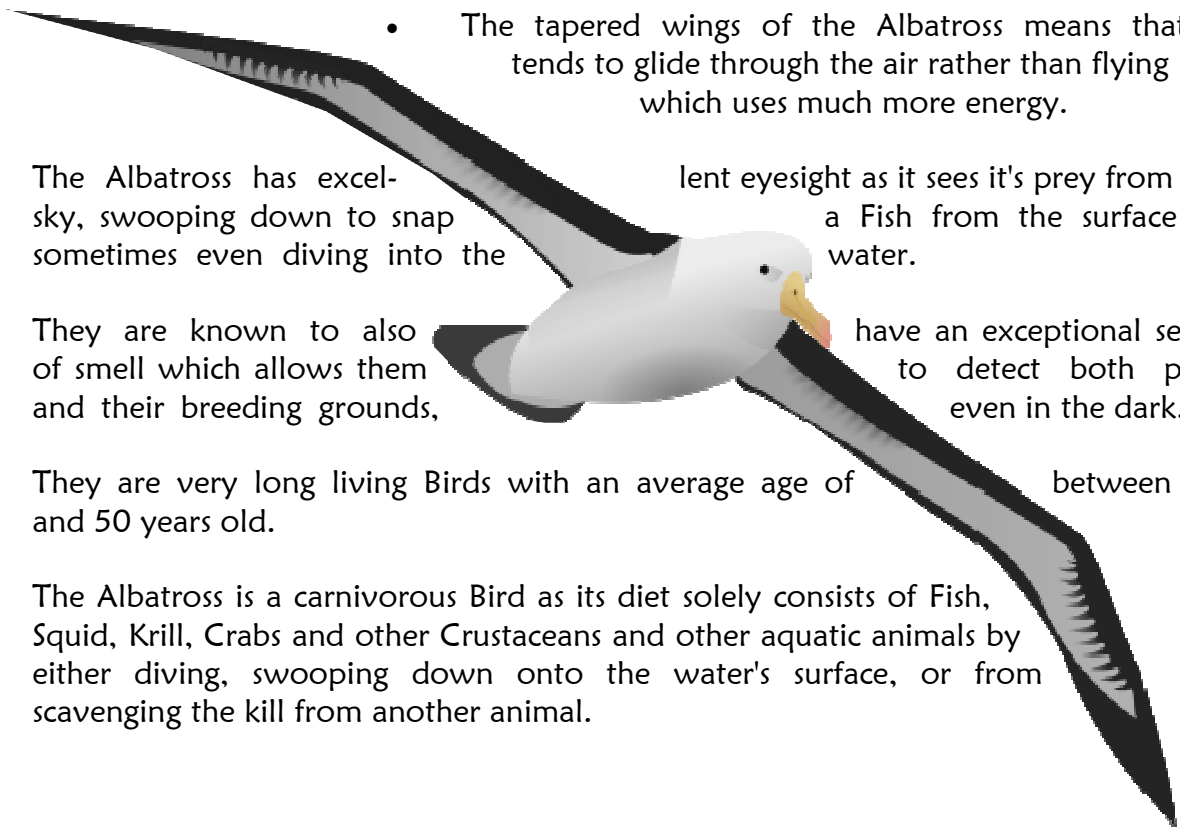
## Warm-blooded ANIMALS



Body temperature stays the same when it's cold or hot outside.

# Factsheet: Albatross

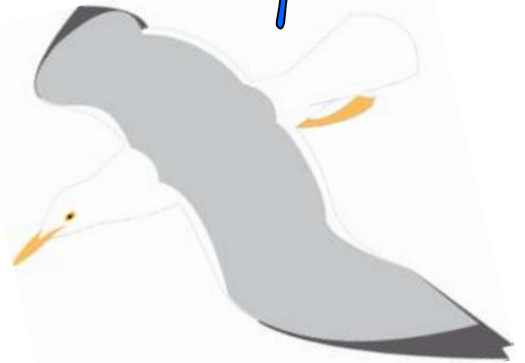
- The Albatross is a large species of sea-bird found throughout the southern Pacific and even into the colder Antarctic regions.
- There are 21 different species of Albatross found across the southern seas, but sadly 19 of the different Albatross species are said to be threatened with extinction today.
- The Albatross is closely related to other sea-birds including Petrels, which are all unique among Birds due to the tubular nostrils on either side of the top of their bill, meaning these Birds are often referred to as Tubenoses.
- The Albatross is one of the largest Birds in the skies as the wingspan of the male Wandering Albatross can easily reach 3.5 meters or more in length, meaning that it has the largest wingspan of any Bird.
- The Wandering Albatross also has a body that is more than 1 meter long (including the tail), with the size of other species generally being slightly smaller.
- The Albatross is an easily identifiable Bird with long, narrow wings, a large head, and a long, strong bill which is hooked at the end and has sharp blades on either side to handle slippery prey.
- There are three toes on each of the Albatross's feet with webbed skin between each one. Unlike many other species of Bird, the Albatross has no hind toes as these sea-birds simply have no need for them.
- The tapered wings of the Albatross means that it tends to glide through the air rather than flying which uses much more energy.
- The Albatross has excellent eyesight as it sees its prey from the sky, swooping down to snap a Fish from the surface or sometimes even diving into the water.
- They are known to also have an exceptional sense of smell which allows them to detect both prey and their breeding grounds, even in the dark.
- They are very long living Birds with an average age of between 40 and 50 years old.
- The Albatross is a carnivorous Bird as its diet solely consists of Fish, Squid, Krill, Crabs and other Crustaceans and other aquatic animals by either diving, swooping down onto the water's surface, or from scavenging the kill from another animal.



# The Albatross

By: William John Hopkins

Once upon a time there was a wide river that ran into the ocean, and beside it was a little city. And in that city was a wharf where great ships came from far countries. And a narrow road led down a very steep hill to that wharf, and anybody that wanted to go to the wharf had to go down the steep hill on the narrow road, for there wasn't any other way. And because ships had come there for a great many years, and all the sailors and all the captains and all the men who had business with the ships had to go on that narrow road, the flagstones that made the sidewalk were much worn. That was a great many years ago.



The wharf was Captain Jonathan's and Captain Jacob's and they owned the ships that sailed from it; and, after their ships had been sailing from that wharf in the little city for a good many years, they changed their office to Boston. After that their ships sailed from a wharf in Boston.

Once, in the long ago, little Jacob and little Sol had gone in the brig '*Industry*' on a voyage to far countries; and they had been to the countries and had sailed again for home, but they had not got out of the warm oceans. And one morning little Jacob and little Sol came on deck together. They didn't race through their breakfast as they had been used to doing, because Captain Solomon had put a stop to that. And, as soon as they got on deck, they looked all around to see what was up that morning. Far away they saw the upper sails of a ship that was going the same way they were, but they didn't see anything else except the blue water, although they looked very carefully out ahead and on both sides. But, right astern of the ship, and pretty near, was a great, enormous bird.

The bird was so near that the little boys could see it very well, and they could see what color it was, and the shape of its bill, but they couldn't see its back nor the top of its head, because the bird was above them. If they had climbed up on the mast they could have seen its back, but they didn't think of that then. The bird was all white, so far as they could see, and it had a bill that was rather long and straight, and was hooked at the end. And the bird just sailed along and waved a little, up and down, but it didn't move its wings, so far as the boys could see, and they watched it for a long time.

Its wings were enormous. Little Sol thought they were almost as long as the main-top-gallant yard if you could measure them spread out, as the bird was sailing. And little Jacob looked very wise and he said that he didn't know how long the main-top-gallant yard was, but he should think they might measure two fathom and a half from tip to tip. And little Jacob felt rather proud when he had said that, because he had guessed in fathoms.

# The Albatross

Little Sol looked rather scornful and said "Huh!" And then little Jacob asked him what kind of a bird it was, and little Sol didn't know. Then little Jacob said "Huh!" So they went to ask Mr. Steele or Captain Solomon. Captain Solomon was standing right behind them, and he was smiling because he had heard what the boys said. And he said that the bird was an albatross, and that little Jacob was pretty nearly right about the length of its wings. Little Sol was taken down a peg and didn't say anything.

Then Captain Solomon went on to say that albatrosses often followed ships for days together, and the sailors never could see that they had to move their wings, but they sailed along just as fast as the ship sailed. He had seen lots of them in his time, but he had never seen them do anything else but sail, just as that one was doing then. And how they managed it, he didn't know, and nobody else knew, so far as he had ever heard.

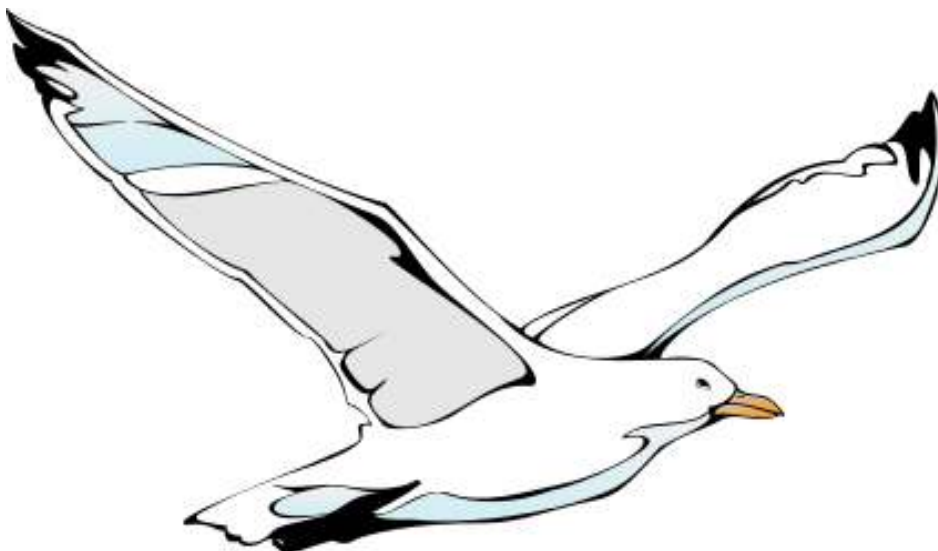
Then little Sol asked what the bird was following the ship for. And Captain Solomon said that he supposed that the albatross was following the ship to get the scraps that the cook threw overboard. At least, he didn't know any other reason, and the albatross took the scraps, anyway. They were like sharks in that way.

Then little Sol asked him if they couldn't catch the albatross with a hook and a piece of pork, as they had caught the shark. And Captain Solomon said that they could, but that Sol had better not try it, if he knew what was good for him; for the sailors thought that it always brought the worst kind of luck to a ship to kill an albatross, and he didn't know but they were right. And little Jacob was glad Captain Solomon said that, for he did not want the albatross killed, but he would rather watch it sailing along with the ship.

So nobody tried to do any harm to the albatross, but the men were all glad that it was there. And the little boys watched it almost all of that day. And the next day it was there, and they watched it, and they watched it the day after the next, too; but the morning after that it wasn't there.

Little Jacob was sorry that it had gone, and the sailors were sorry, and they said that there would be a change of weather. And little Jacob went down into the cabin to write

all about the albatross in the log-book and to see the barometer, to see whether it said that the weather would change. The barometer was what Captain Solomon called "the glass," and people could tell, by looking at it, whether it was going to be stormy or not.





# Factsheet: *Badger*

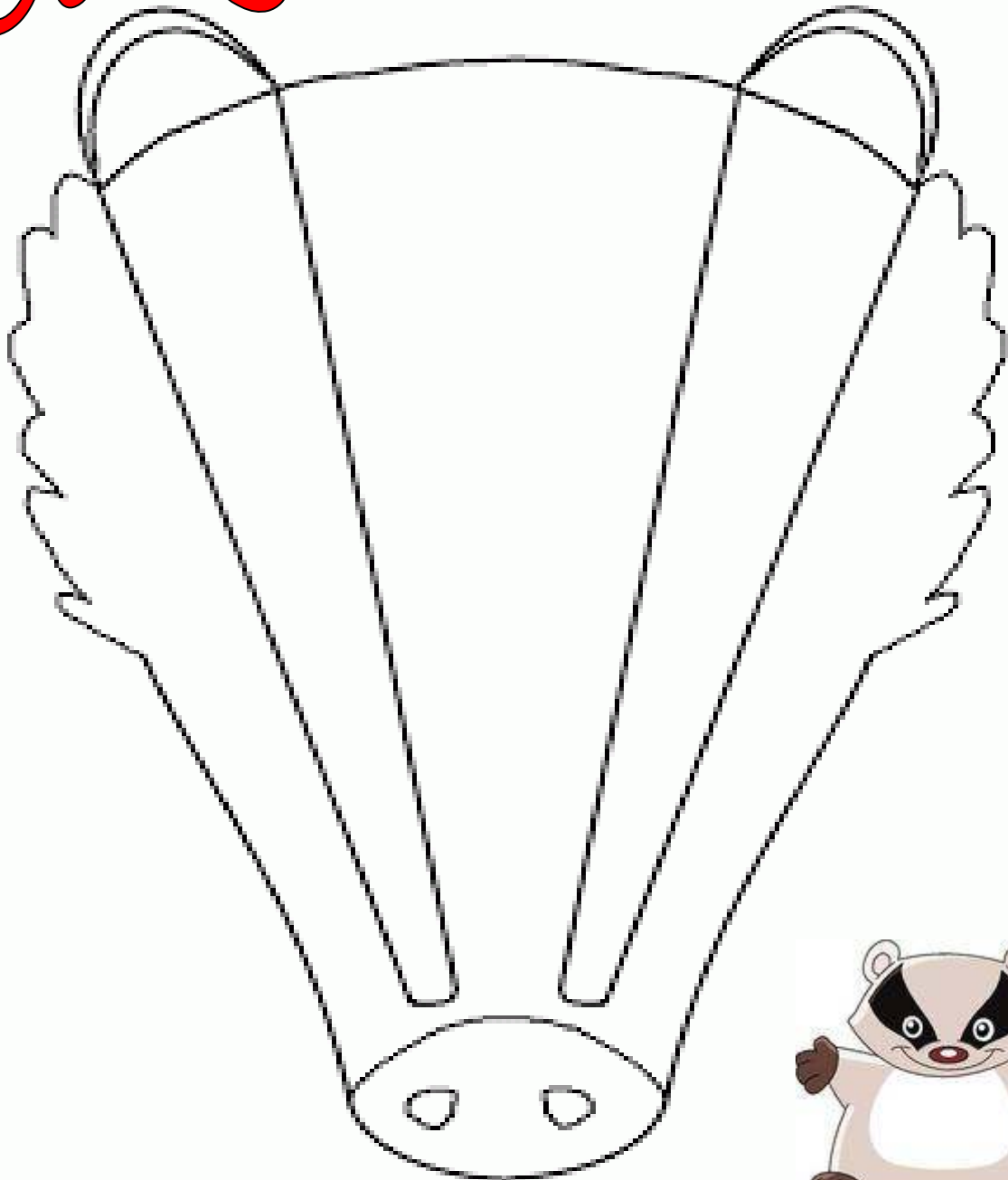


- Badgers are found living in the forests of Europe and western Asia, scavenging for roots and berries as well as worms and insects.
- Amazingly Badgers can run up to 30km an hour for short periods of time and have been known to successfully fight off bigger mammals such as wolves, coyotes and bears!
- The most commonly known Badgers are the white and black striped Badgers in western Europe.
- Badgers are thought to be related to otters and weasels and can often grow to nearly a meter in length!
- The Badger lives in underground burrows which often contains a maze of tunnels. It is thought that when digging its den, the Badger is capable of removing tonnes of soil!
- The Badger is the common name for any animal of the Badger three subfamilies, which belong to the family *Mustelidae*. This is the same mammal family as ferrets, weasels, otters, and several other types of carnivore [meat eating] animals meaning that the Badger is most closely related to these animals.
- There are eight different species of Badger, and these Badger species are split into three Badger subfamilies, the Badgers of Europe and Asia, the Ratel Badger or honey Badger, and the American Badger.
- Typical Badger species have short legs and Badgers also tend to have a relatively heavy build.
- The Badgers lower jaw is articulated to its upper jaw meaning so that it is almost impossible to dislocate its jaw. This enables the Badger to maintain its hold on its prey with great ease, but limits the jaw's movement to hinging opening and shutting or sliding from side to side.





# Badger Mask



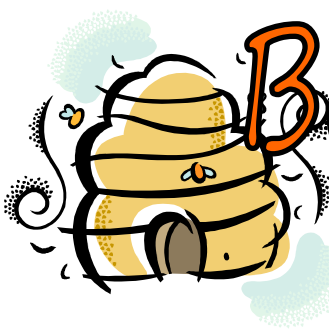
- *Print the template and stick it on a cardboard paper*
- *Cut the mask out and cut the eyes too*
- *Colour the mask in*
- *Punch two holes on the sides and tie elastic string*

# Factsheet: **B**ee

- Bees fly from flower to flower, sipping nectar and collecting grains of pollen.
- Bees have a special tongue that sucks up the nectar and a crop in their throat for storing it until they get back to the hive, where it is turned into honey to use as food.
- Many plants depend on bees to spread pollen, helping them to reproduce.
- Flowers that attract bees are usually yellow, blue, or purple.
- Many bees specialize in one plant species.
- In areas where different flowering plants bloom at the same time, this keeps different bee species from fighting over the same flower!
- Honeybees and bumblebees live in colonies or hives.
- All the bees in the colony work together for the good of the hive. Each has a job to do: the queen lays the eggs and the workers build the honeycomb, care for the larvae and collect the food.



# Bee Hive Building



## What you will need:

- Bubble wrap
- White cardboard paper
- Yellow poster paint
- Paint brush
- Black markers
- Round edged Scissors

## How to do it:

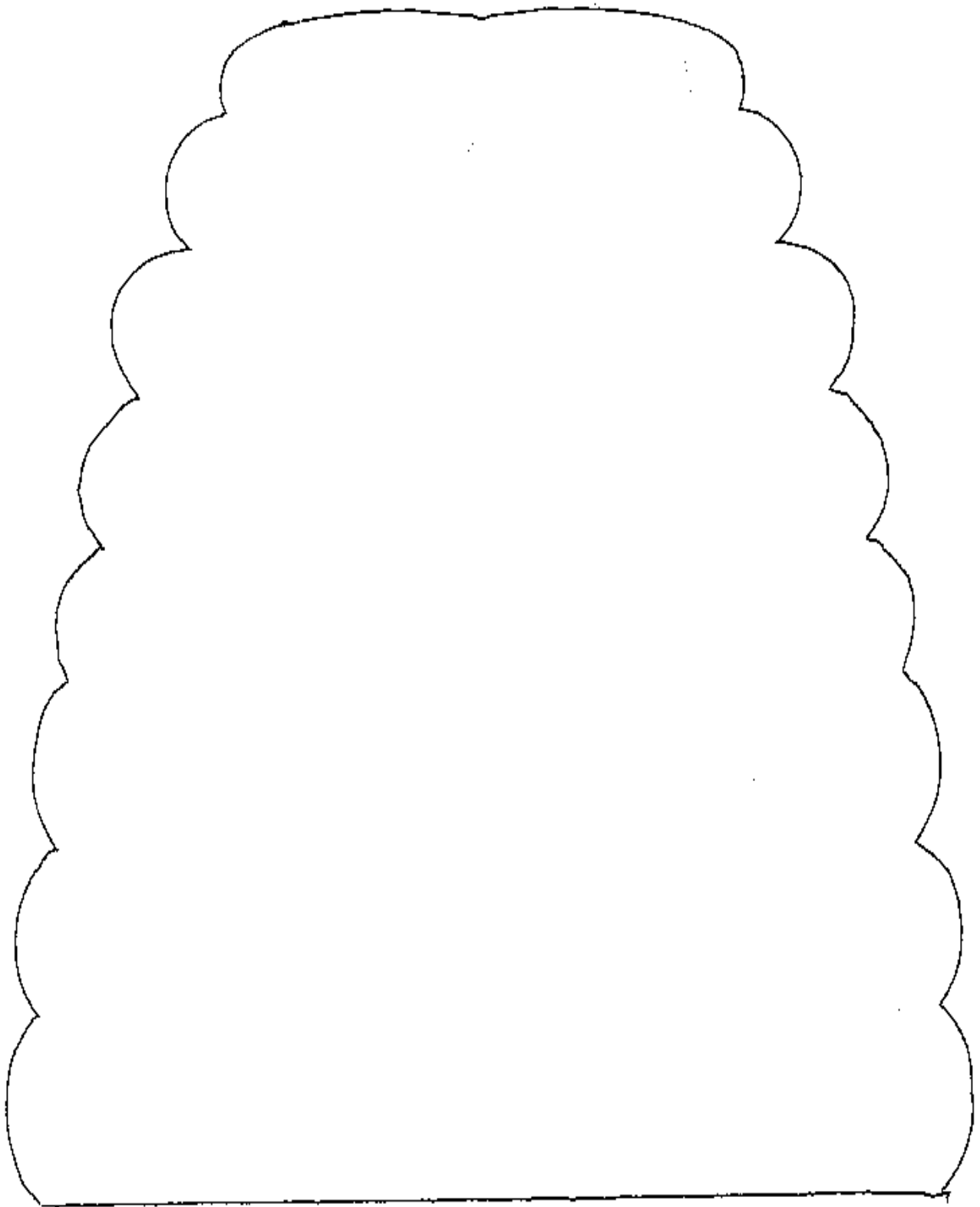
- Cut out our bubble wrap in the shape of the beehive (template in the following page).
- Paint over the bubble wrap (bubble side up) with yellow paints. Feel free to use more paint colours such as orange to give the bee hive more dimension.
- Next, press your painted bubble wrap onto your paper.



- Then dip your thumb into the yellow paint and create bees swarming the hive.
- Take a marker to draw the stripes and wings on your bees.
- And there you have it...a really simple and cute craft!

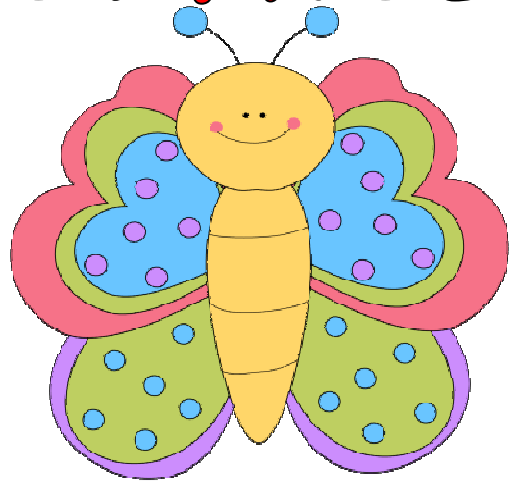


# Template: Bee Hive

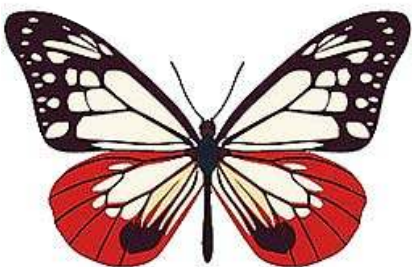


# Factsheet: Butterflies

- Butterflies are insects.
- A butterfly's lifecycle is made up of four parts, egg, larva (caterpillars), pupa (chrysalis) and adult.
- Butterflies attach their eggs to leaves with a special glue.
- Most caterpillars are plant eaters (herbivores).
- Fully grown caterpillars attach themselves to a suitable twig or leaf before shedding their outside layer of skin to reveal a hard skin underneath known as a chrysalis.
- An adult butterfly will eventually emerge from the chrysalis where it will wait a few hours for its wings to fully develop, before flying for the first time.
- Butterflies can live from anywhere between a week and a year, depending on the species.
- Butterflies have four wings.
- Butterflies often have brightly coloured wings with unique patterns made up of tiny scales.
- Most butterflies feed on nectar from flowers.



- Butterflies have taste receptors on their feet.
- Scientists estimate that there are between 15000 and 20000 different species of butterfly.
- Monarch butterflies are known for their long migration. Every year monarch butterflies will travel a great distance (sometimes over 4000 km), females will lay eggs and a new generation of monarchs will travel back, completing the cycle.



# Beaded Butterfly

## What you need:

- Recycled cardboard tube
- Black pipe cleaner
- Pony beads, various colors
- Craft paint
- Scissors
- Hot glue gun

## What you do:

- Flatten the cardboard tube then cut it in half. Each cardboard tube can make 4 butterflies.
- Paint cardboard tube inside and out and allow to dry.
- Bend pipe cleaner in half and thread on 6 pony beads. Trim the end of the pipe cleaner for antennae.
- Cut cardboard tubes into 1/2" strips.
- Bend strips about two-thirds the way down to create a small and large loop.
- Lay tubes next to each other and glue together.
- Glue the beaded body to the top of the cardboard tube wings.



# Factsheet: *Cheetah*

- The cheetah is the fastest land animal in the world. They can reach a top speed of around 113 km per hour.
- A cheetah can accelerate from 0 to 113 km in just a few seconds.
- Cheetahs are extremely fast however they tire quickly and can only keep up their top speed for a few minutes before they are too tired to continue.
- Cheetahs are smaller than other members of the big cat family, weighing only 45 – 60 kilograms.
- One way to always recognise a cheetah is by the long, black lines which run from the inside of each eye to the mouth. These are usually called “tear lines” and scientists believe they help protect the cheetah’s eyes from the harsh sun and help them to see long distances.
- Cheetahs are the only big cat that cannot roar. They can purr though and usually purr most loudly when they are grooming or sitting near other cheetahs.
- While lions and leopards usually do their hunting at night, cheetahs hunt for food during the day.
- A Cheetah has amazing eyesight during the day and can spot prey from 5 km away.
- Cheetahs cannot climb trees and have poor night vision.



- With their light body weight and blunt claws, cheetahs are not well designed to protect themselves or their prey. When a larger or more aggressive animal approaches a cheetah in the wild, it will give up its catch to avoid a fight.
- Cheetahs only need to drink once every three to four days.





# Build the Cheetah's habitat

Build your very own cheetah habitat using household stuff. Help save our environment with this cute craft using recyclable items. .



Items such as:

- cardboard sheets
- cardboard boxes
- rocks from your home garden
- animal cut outs or toy animals
- dried twigs
- kite paper

- Coloured paper,
  - Plastic/carton egg crates,
  - Old magazines and news papers, etc.,
- will definitely come in handy for this task.



These pictures give you a clear idea of how to build your very own cheetah habitat.

# Factsheet: Dwarf Crocodile



- The Dwarf Crocodile is the smallest species of crocodile in the world and is natively found in the rainforests of West Africa.
  - The Dwarf Crocodile has a short, broad snout and tough scales that cover its entire black body.
  - The Dwarf Crocodile rarely grows to more than 1.6 meters in length.
- 
- The Dwarf Crocodile has a number of adaptations that aid it when in the water including their vertically flattened, muscular tail that is used to propel their bodies when swimming and webbing between their toes which helps them to negotiate the slippery banks. Their eyes and nostrils are located on the top of their heads to enable the Dwarf Crocodile to both see and breathe whilst the rest of its body is submerged, allowing it to both watch for prey and predators almost completely hidden.
  - Dwarf Crocodiles tend to be found in slow-moving rivers in areas of dense rainforest along with swamps, permanent pools of water and seasonal floodplains.
  - Despite being specially adapted to life in the water, Dwarf Crocodiles also spend a lot of time on land where they dig burrows in the river bank to rest during the day. They are however, severely threatened by the loss of their habitats throughout much of their natural range primarily in the form of deforestation for logging, to clear land for agriculture and make way for growing human settlements.
  - The Dwarf Crocodile is a nocturnal and generally solitary animal that hunts for small prey both in the water and on the banks in the dark.
  - The Dwarf Crocodile is a coldblooded animal meaning that it has to sunbathe to warm its body up to give it the energy to hunt, and enter the water in order to cool it down.
  - When in the water, Dwarf Crocodiles sink their bodies down below the surface so that only their eyes and nostrils are exposed so they are able to hide from potential predators and ambush unsuspecting prey.



# Crocodile Cookies

## *What you'll need:*

- 110grams unsalted butter, softened
- 100grams caster sugar
- 1 medium egg
- 1/2 table spoon vanilla extract
- 250grams plain flour
- 1/4 table spoon bicarbonate of soda
- 1/4 table spoon baking powder
- 1/4 table spoon salt
- Cling Film (Stretch and Seal Film)
- Coloured Icing Pens



## *How to do it:*

- Beat the butter, sugar, eggs and vanilla until fully combined
- Mix in the flour, baking powder, salt and bicarbonate of soda until fully combined.
- Cover the bowl with cling film and chill in the fridge for 2 hours.
- Preheat the oven to 180C fan assisted.
- On a lightly floured surface, roll out the combined mixture to 1cm thick and cut out the crocodile shapes.
- Grease and lightly flour a baking sheet.
- Place the croc cookies on the tray, 1 inch apart and bake for 5 minutes, until the edges just begin to turn brown.



- Cool on a wire rack.
- Decorate with coloured icing pens.





# Komodo Dragon

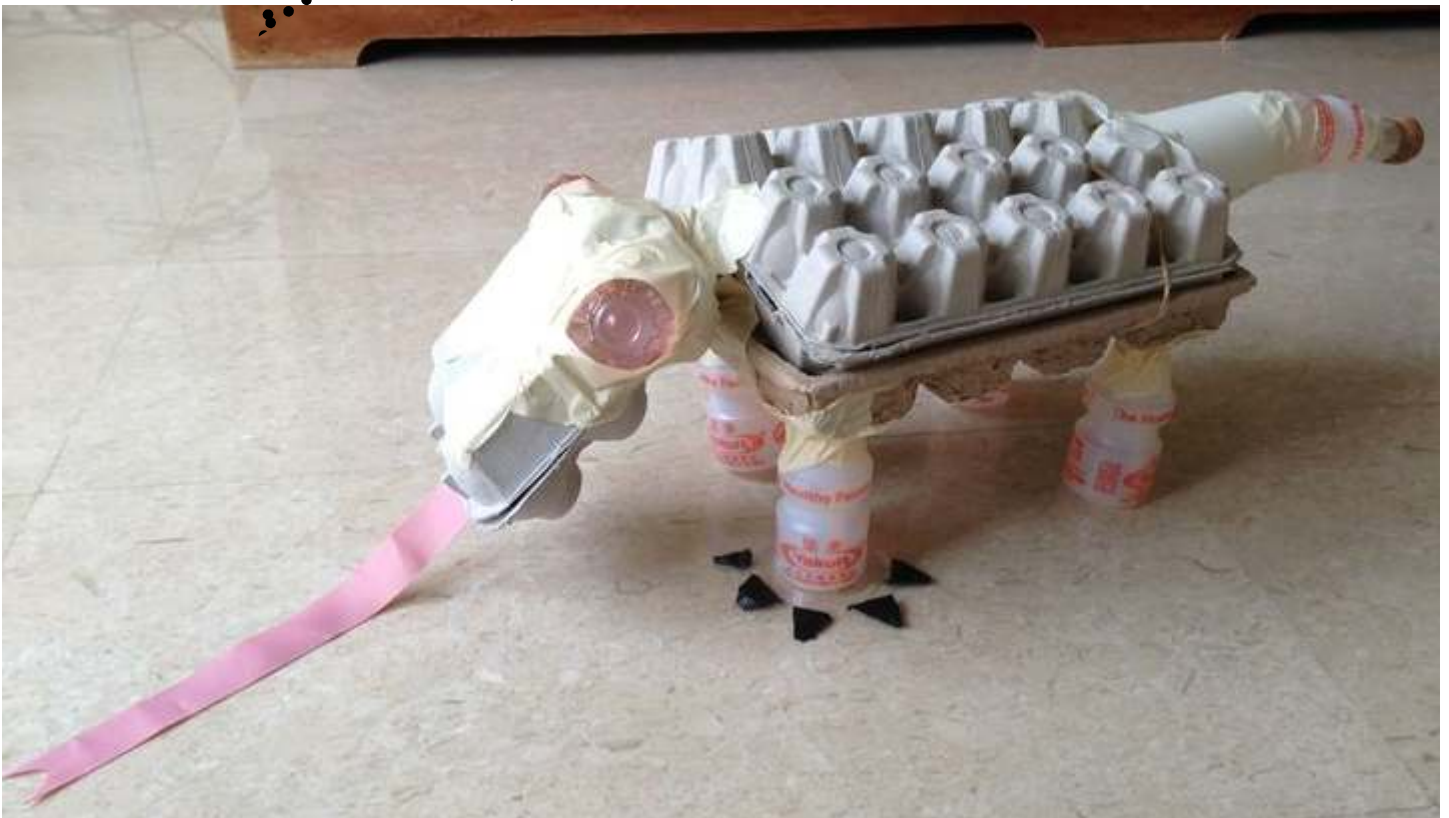
- Komodo dragons are the largest kind of lizard in the world and can at times be very aggressive.
  - Komodo dragons are carnivores (meat eaters) and can be very aggressive.
- The Komodo Dragon is an enormous reptile that can grow up to three meters long and weigh 150kg.
  - They are incredibly strong and powerful with long, thick bodies, short, muscular legs and an almighty tail that is used for both fighting and for propping the animal up when it is standing on it's hind legs.
  - The Komodo Dragon has long and sharp, curved claws that are often used for digging and it's greyish brown skin is covered in small scales and folds around the neck. Komodo Dragons have relatively small heads compared to their large body size and wide, powerful jaws that conceal a mouth that is filled with deadly bacteria.
  - Although the Komodo Dragon has good eyesight, the majority of it's surroundings are sensed to smell which the Komodo Dragon does with it's long and deeply forked tongue.
  - Today, they are becoming more threatened in their natural environments with the loss of their habitats to deforestation for timber has pushed the last remaining populations into smaller and more isolated regions.
  - Komodo Dragons are known to be excellent swimmers, travelling from one island to another over a relatively long distance.
  - Komodo Dragons tend to live for an average of 30 years in the wild.



# Make a Komodo Dragon from Recycled Crafts

*Try your hand at making your own  
Komodo Dragon out of household junk  
and items that can be recycled.*

*Egg Cartons, disposable bottles and cups  
and others may come in very handy as  
shown in the picture below !*



# Factsheet: Kookaburra

- At twilight, kookaburras make loud, long calls that sound like laughter to let all know the boundaries of their territory.
- The largest of the kookaburras mate for life, living in pairs or small family groups.
- Chicks are born blind and it takes them a month for their feathers to fill in.
- The birds grow up to 47 cm long and weigh about .5 kg.
- Their bills are as long as 10 cm.
- Getting all their moisture from their food, they never need to drink water.
- They nest in hollow trees or termite mounds.
- Kookaburras have a life span of about 20 years.



- They feed on snakes, lizards, mice, the young of other birds, as well as insects and small reptiles.
- Their enemies in nature are cats, dogs, foxes, and larger predatory birds such as eagles and owls.
- Kookaburras live in forests, open woodlands, or on the edges of plains in Australia, Tasmania, and New Guinea.
- These birds come from the family of birds called 'Kingfishers'.
- According to an Aboriginal legend, the Kookaburra's famous 'laughter' every morning is a signal for the sky people to light the great fire that illuminates and warms the earth by day (Sun).

# The Kookaburra

The Kookaburra has no work  
He has no work to do  
His game is on a tree lurk  
And catch a snake or two  
And when he's cut the snake in half  
He sits upon a tree to  
Ha ha ha ha ha he he he he he (x2)

## Kookaburra sits on an old gum tree

Kookaburra sits on the old gum tree,  
Merry merry king of the bush is he.  
Laugh, Kookaburra, laugh, Kookaburra,  
Gay your life must be!

Kookaburra sits in the old gum tree  
Eating all the gumdrops he can see  
Stop, Kookaburra, Stop, Kookaburra  
Leave some there for me.



Kookaburra sits in the old  
gum tree,  
Counting all the monkeys he  
can see  
Stop, Kookaburra, Stop,  
Kookaburra,  
That's no monkey, that's me.

# Factsheet:

# Macaw

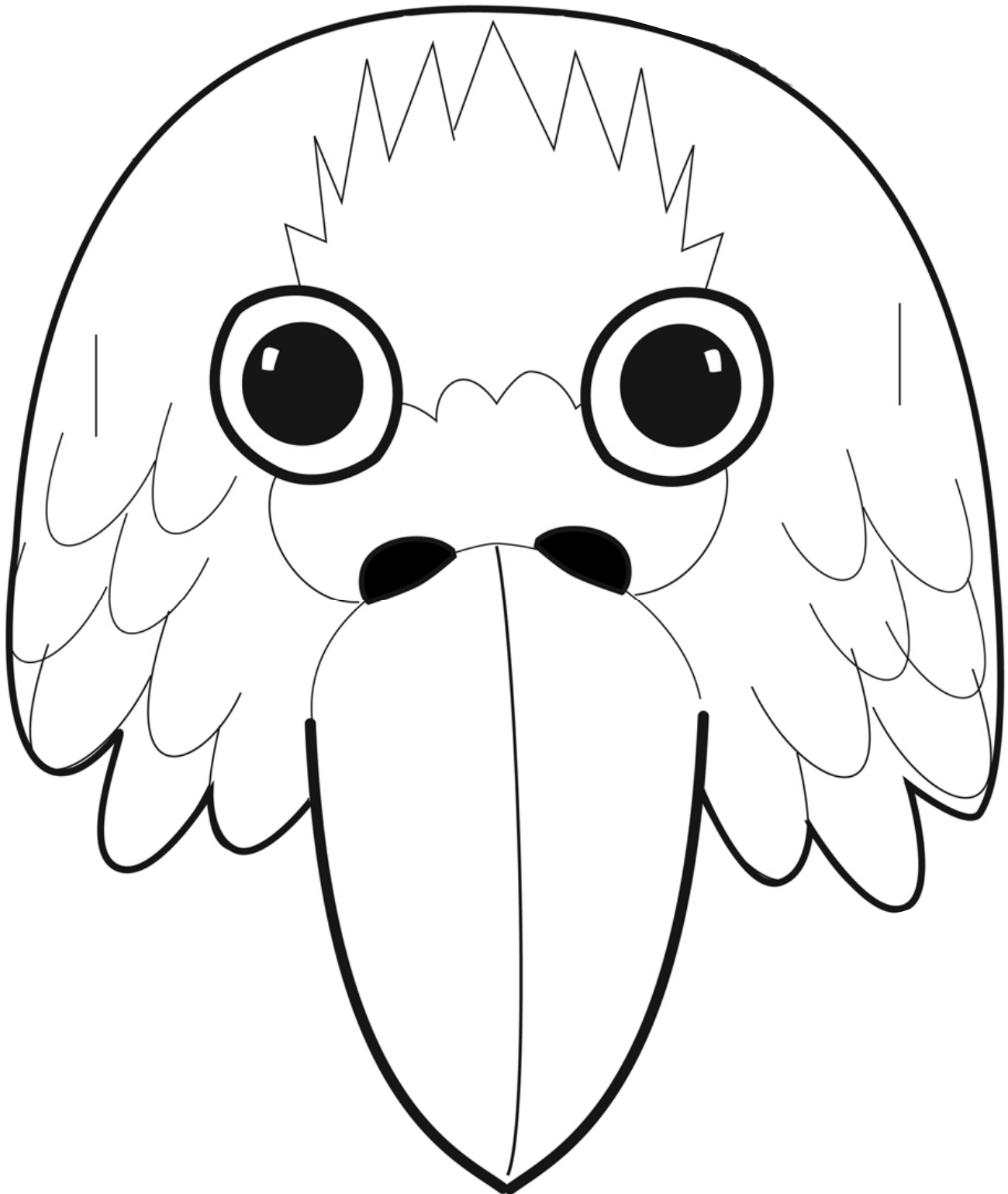


- The Macaw is a colourful tropical parrot native to Central and Southern America. There are 17 different species of Macaw found in the rainforests of South America.
- Many of the different Macaw species are today considered to be endangered animals.
- The Macaw is an omnivorous animal and feeds on nuts and fruit in the trees along with insects, eggs and small mammals and reptiles.
- The Macaw is known to sleep during the night and in the morning the it will often fly long distances in order to find food.
- The Macaw is well known for it's array of brightly coloured feathers which are often many different colours including blue, red, yellow and green.
- The Macaw has a large and powerful beak with which he can break the shells of nuts and seeds more easily. Like other species of parrot, Macaws have four toes on each foot, with two toes facing forward and two toes facing backward. This foot adaptation helps the Macaw to grip onto prey and tree branches more easily and allows it to perch in the trees without slipping off.
- Macaws are known to be intelligent and very sociable birds and can often be seen together in large flocks of up to 30 individuals.
- Macaws communicate between one another using loud vocal calls such as squawking and screaming. Some species of Macaw are even known to be able to mimic (copy) human sounds.
- The Macaw is one of the few animals that is known to have the same mate for their whole lives. Other examples are the brown bears and the hawks.
- The Macaw appears on one of the Brazilian bank notes.





# Macaw Mask



- *Print the template and stick it on a cardboard paper*
  - *Cut the mask out and cut the eyes too*
  - *Colour the mask in*
- *Punch two holes on the sides and tie elastic string*