

Photo Nature Walk & Scavenger Hunt

HOW MANY OUTSIDE THINGS CAN YOU FIND?

A TREE WITH SMOOTH BARK

SOMETHING BLUE

EVIDENCE OF AN ANIMAL

A PLANT WITH BERRIES

A YELLOW FLOWER

SOMETHING BROWN

A SHADE PLANT

SOMETHING BIGGER THAN YOU

A PLANT SEED

A TINY PEBBLE

A SMOOTH ROCK

A TWIG

SOMETHING ROUGH

A VERY LARGE STICK

AN INSECT

SOME MOSS

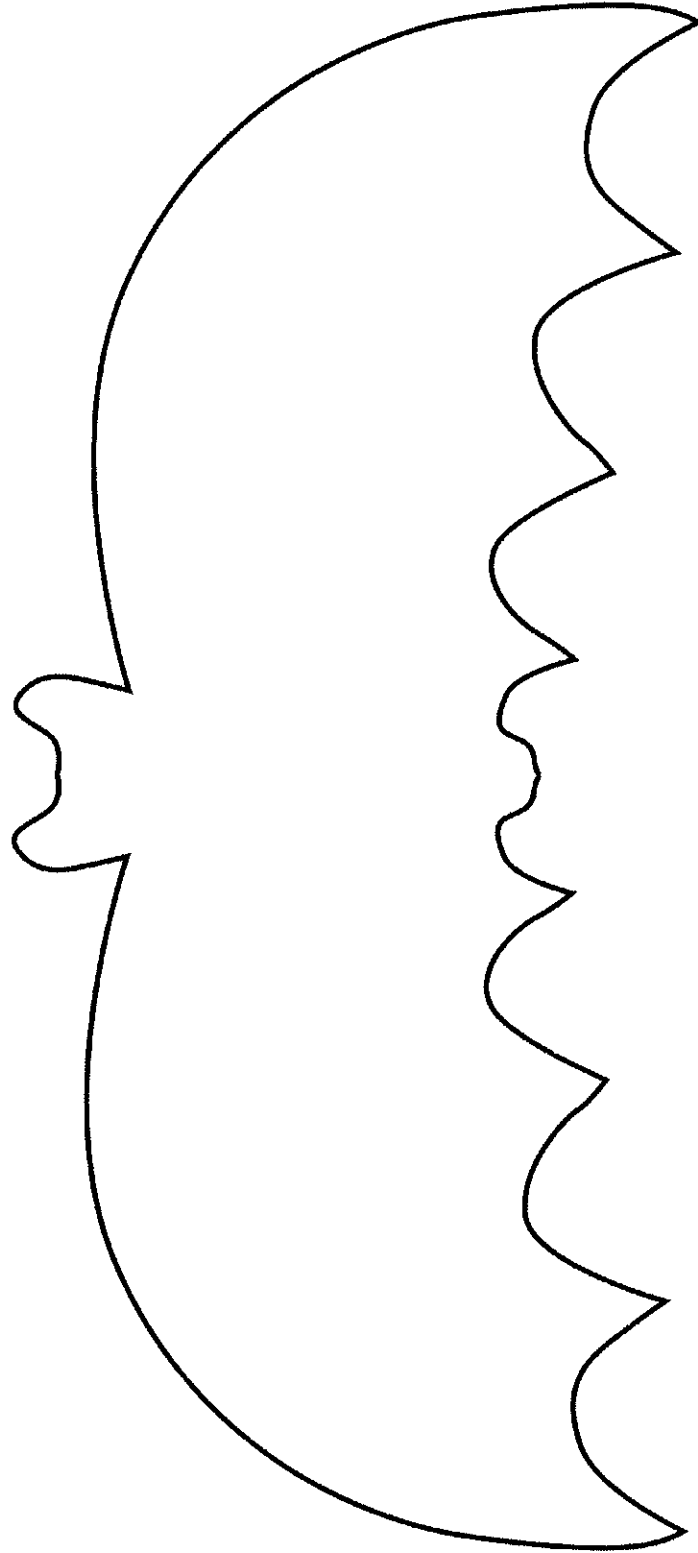
A NEST

A CATERPILLAR

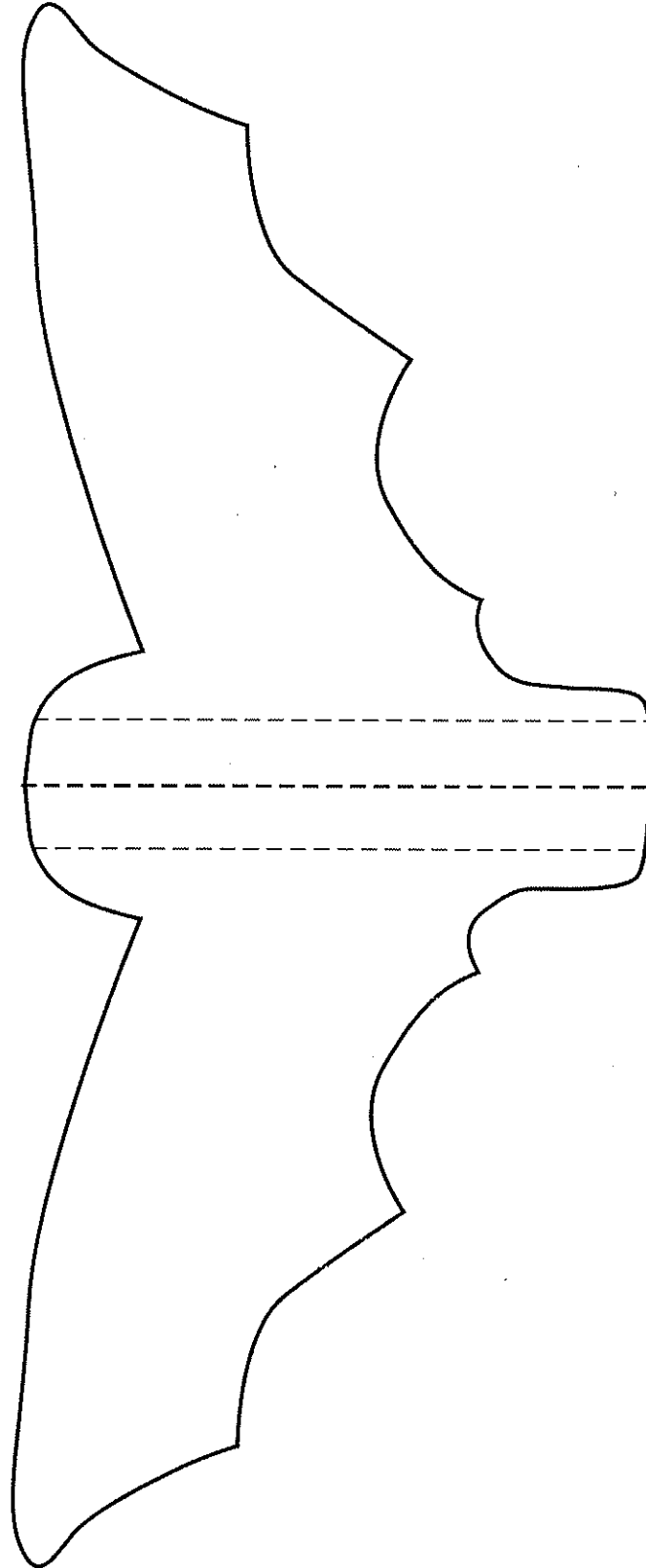
A FLYING BIRD

A SQUIRREL

bat mask



bat plane





Create-an-Animal



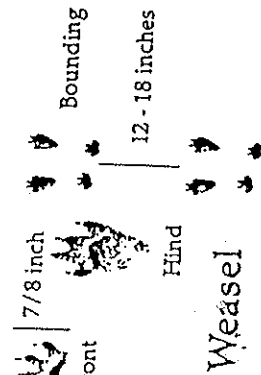
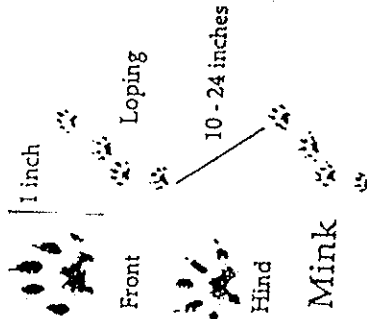
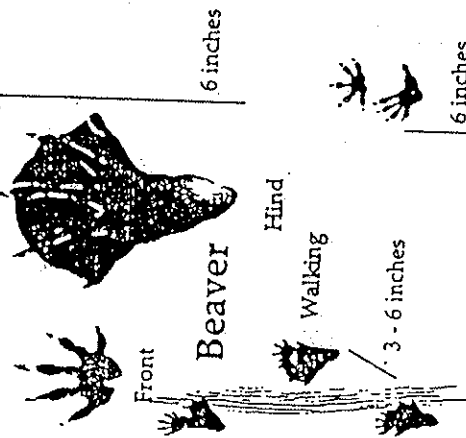
You are a zoologist who has just discovered a new animal species. As every good scientist does, you will document your exciting finding. Design a fact sheet highlighting this new animal discovery. Be sure to include the following key pieces of information:

- your animal's name
- your animal's basic needs
- how your animal's needs are met
- where your animal lives
- a colored illustration of your animal in its natural habitat

Your fact sheet might have text features like labels, captions, maps, bold words, subheadings, and more.

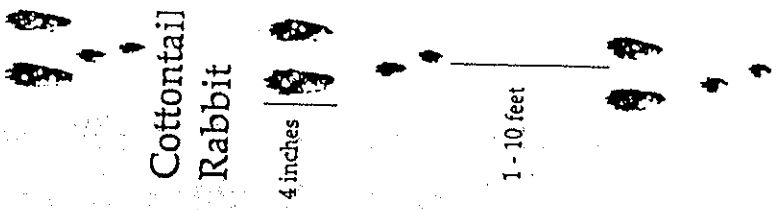
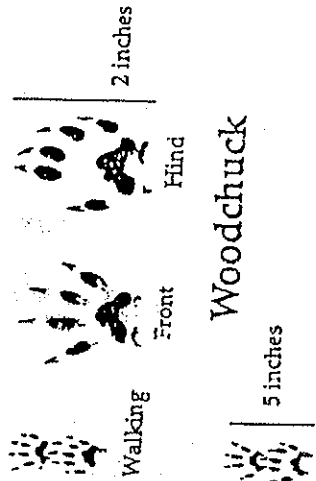
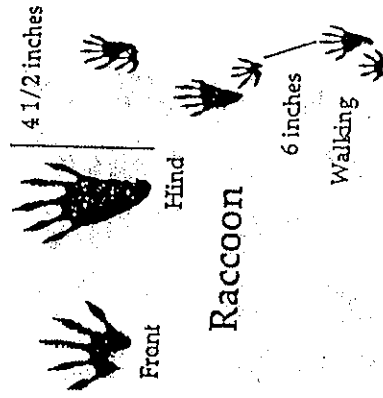
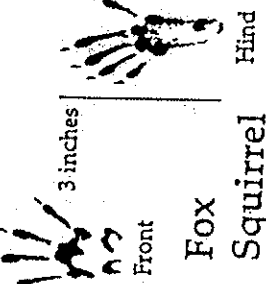
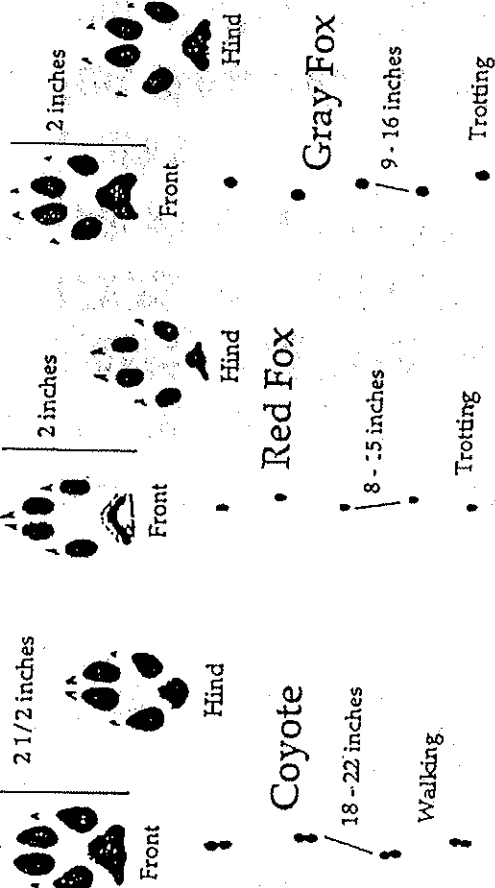
Winter Tracks

Winter Tracks



Winter Tracks

4+ Winter Tracks





Choose your answers

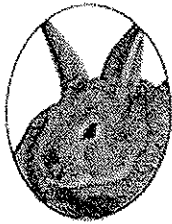
- blind
- caves
- chiroptera
- colony
- echolocation
- endangered
- fox
- insects
- insectivorous
- mammal
- nocturnal
- one
- pollinate
- pup
- sonar
- thousand

Across

1. An animal that is active at night is called _____.
2. All bats can see; no bats are _____.
3. The scientific name for bats, which means hand-wing, is _____.
4. A kind of bat whose face looks like a dog is a flying _____.
5. A bat that feeds on insects is called _____.
6. Most mother bats produce only _____ (how many) baby a year.
7. Many bats spend part of the year living in _____.
8. Echolocation used by bats is a kind of _____.

Down

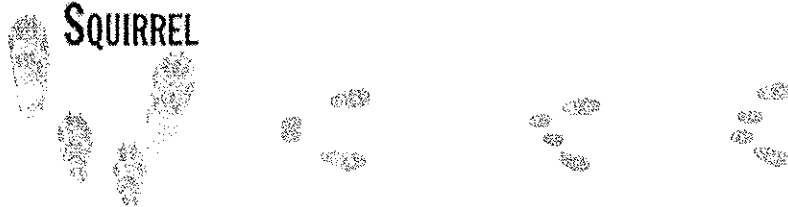
1. The process of navigating and locating food using sound is called _____.
2. A bat is a _____.
3. Nectar bats _____ flowers, just like hummingbirds.
4. An animal that is disappearing is said to be _____.
5. There are more than a _____ (how many) kinds of bats.
6. A baby bat is called a _____.
7. About 70% of all bats eat _____.
8. A group of bats living together is called a _____.



RABBIT



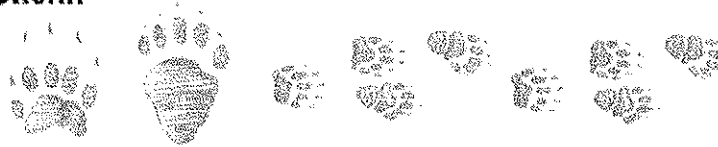
SQUIRREL



OPOSSUM



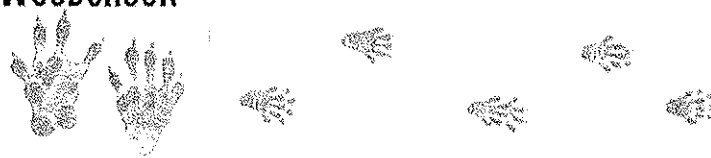
SKUNK



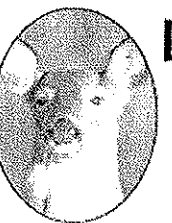
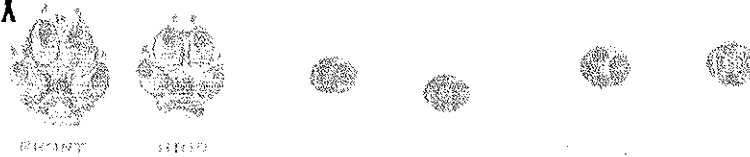
RACCOON



WOODCHUCK

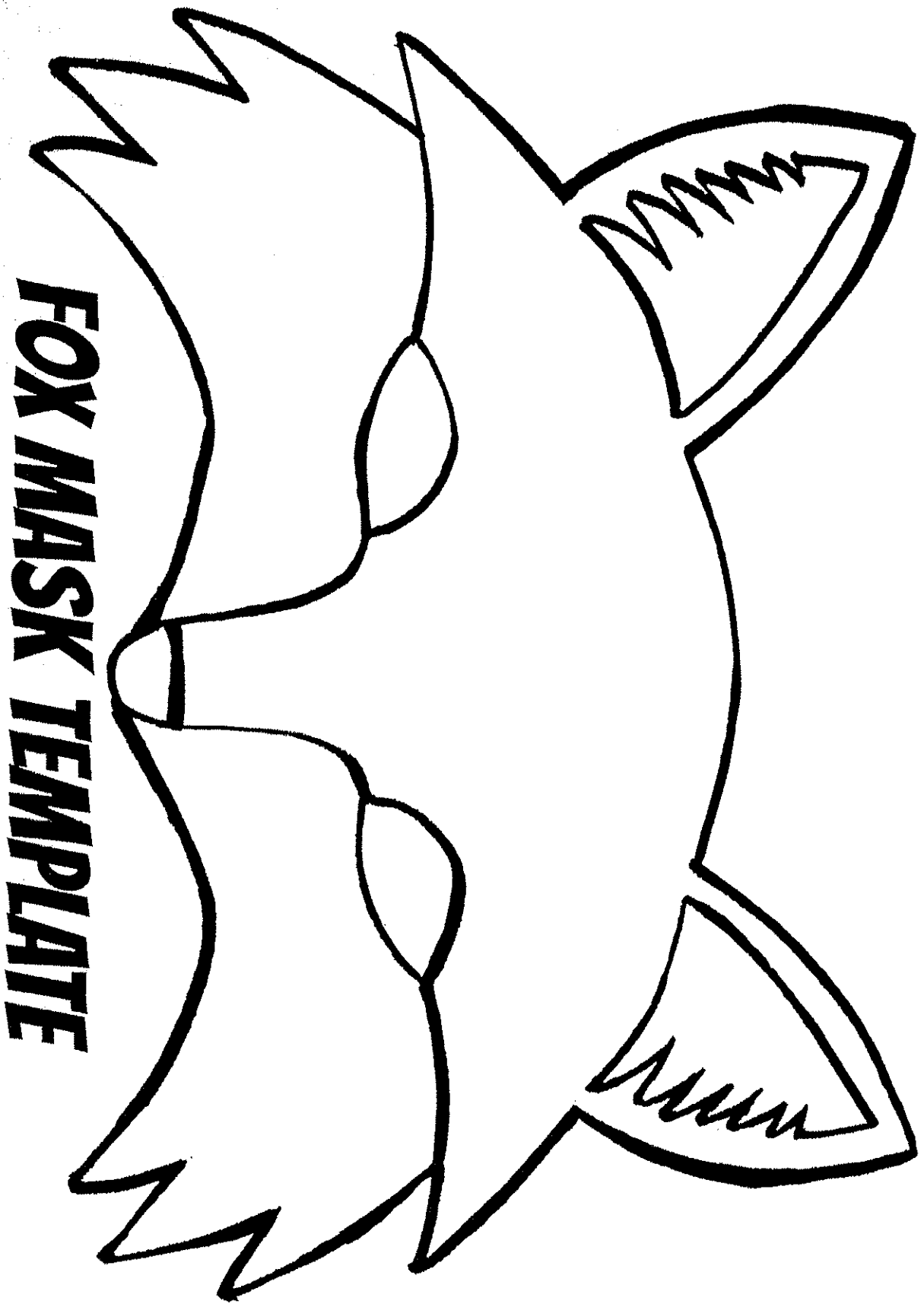


FOX



DEER





FOX MASK TEMPLATE

Hippie Mama

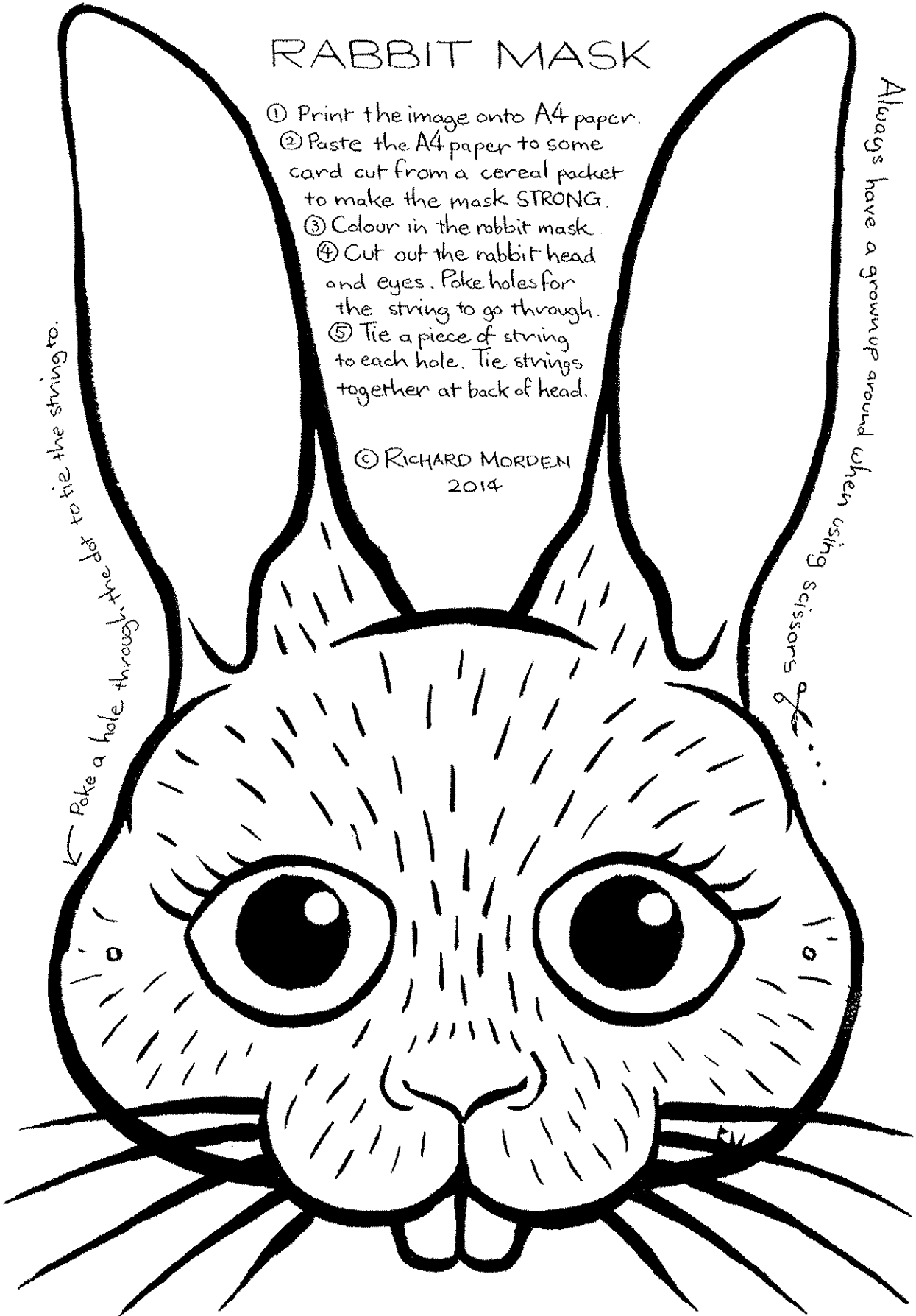
RABBIT MASK

- ① Print the image onto A4 paper.
- ② Paste the A4 paper to some card cut from a cereal packet to make the mask **STRONG**.
- ③ Colour in the rabbit mask.
- ④ Cut out the rabbit head and eyes. Poke holes for the string to go through.
- ⑤ Tie a piece of string to each hole. Tie strings together at back of head.

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2014

← Poke a hole through the dot to tie the string to.

Always have a grown-up around when using scissors & ...



All About Bats



MYTHS AND TRUTHS:

MYTH: Bats are blind.

TRUTH: All bats can see. In fact, some bats have eyesight that is three times better vision than humans!

MYTH: All bats have rabies.

TRUTH: Less than 1% of bats have rabies. However it is always best to avoid handling any wild animal, including bats.

MYTH: Bats are dirty.

TRUTH: Bats are extremely clean and groom themselves like cats.

MYTH: Bats are rodents or flying mice.

TRUTH: Bats are not rodents. Unlike mice, most bats have only one baby at a time and live long lives.

MYTH: Bats attack people.

TRUTH: Bats do not attack. They are afraid of humans and avoid people when they can.

MYTH: Bats suck blood

TRUTH: Bats do not suck blood. However, Vampire bats do exist and they do drink blood from non-human animals.

10 FUN FACTS ABOUT BATS:

1) Bats are the only mammals that fly. Scientists classify them into an order called "Chiroptera" which means "hand-wing."

2) There are more than 1,300 species of bats in the world.

3) One insect-eating bat can consume 2,000-6,000 insects in a single night!

4) Bats are important in controlling many disease-carrying and crop-harming insects. They save US farmers over \$1 billion annually!

5) Fruit-eating bats spread seeds as they fly and digest food, which reseeds deforested land.

6) The smallest bat in the world is the Kitties Hog-nosed Bat, also known as the Bumblebee Bat. It weighs as much as a dime and has a six-inch wingspan. Small bats are called microbats and are found all over the world.

They are the only bats found in North and South America. They have large ears, small eyes, small bodies, and use echolocation to find food. They eat a wide range of food, including: insects, nectar, fish, fruit, frogs, and blood.

7) Nectar-feeding bats pollinate many valuable plants including bananas, balsa wood, agave, mangoes, and cashews.

8) In addition to sight, many species of bats have ultrasonic sonar capabilities (echolocation), which they use to navigate and catch insects in total darkness.

9) There are three species of vampire bats that drink blood from non-human animals such as cows, pigs, goats, and chickens. These small bats live in southern Mexico, Central America, and South America.

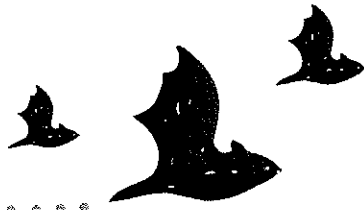
10) The largest bat in the world is the Malayan Flying Fox. It weighs two pounds and has a six-foot wingspan! Large bats are called megabats, or flying foxes, because their faces look like the face of the dog. All megabats live in Africa, Asia, or Australia and consume only fruit nectar.



For more information about bats, visit batweek.org and batslive.pwnet.org

BATWEEK

The Many Benefits of Bats



Bats are one of the most important animals in our environment. With more than 1300 different species in the world, bats are diverse in both how they look and how they keep ecosystems balanced.

INSECT CONTROL:

In North America, bats primarily eat insects—lots of insects. One bat eats thousands of insects each night. Since bats eat so many moths, beetles, flies and mosquitoes, we can use fewer pesticides to control insects. That makes our backyard, neighborhood and food healthier and saves farmers billions of dollars.

POLLINATION:

Bats in the Southwest U.S. and other warm ecosystems around the world help plants grow by pollinating flowers. When nectar-drinking bats stick their long-noses into flowers, they become covered in pollen that they then bring to other flowers, helping plants reproduce. Through pollination, bats help grow fruits such as bananas, avocados and agave.

SEED DISPERSAL:

Fruit bats are key in planting new tropical trees. Each night, fruit bats eat more than double their body weight in fruit. As they fly from tree to tree, their guano falls to the ground, helping to spread seeds across long distances. Thanks to bats in tropical parts of the world, we can enjoy fruits like pineapples, figs and mangoes.

MEDICINE

Scientists studying Vampire bats have created anti-clotting medication to help stroke victims.



TECHNOLOGY

Bat flight and echolocation have inspired advances in sonar, airplane maneuverability and navigation.



FERTILIZATION

Bat guano is used as a powerful fertilizer worldwide, offering economic and agricultural rewards.



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Natural History of Forest & Cave Dwelling Bats



CAVE DWELLING BATS:

Caves are also popular roosting sites for many species of bats. Although many animals avoid caves due to the lack of light, echolocation allows bats to navigate these dark environments. Different caves can be attractive as roosts to different kinds of bats based on qualities such as altitude, size, shape, humidity, and airflow. In addition to serving as roosts, caves are also often used as hibernation spots (also referred to as hibernacula) for some species of bats. While hibernating, bats lower their internal body temperature significantly to conserve energy. Different spots in a cave can provide a variety of different temperatures, so bats can move around from warmer to cooler spots as needed to find agreeable temperatures throughout the cold months. The various crevices, cavities, rocks, and crude walls also provide plenty of hiding spots from predators. Many cave-dwelling bats will have small, flat skulls that allow them to squeeze into the tight spaces that caves provide.

Caves are also useful to bats for energy-related reasons. Bats have fast metabolisms and high rates of both water and heat loss. Not only does flight take a lot of energy, but bats also have exposed wing membranes and small bodies. This combination causes bats to lose up to a third of their body weight each night in water evaporation. Occupying caves with high humidity can slow this constant dehydration, as the bats will not lose as much water from their bodies if there is already a lot of water in the air. Selecting an appropriate cave can be challenging for the bats. Even the most ideal roosting cave might be too far away from their hunting grounds to be practical—it takes a lot of energy to fly between sites!

CONSERVATION:

Unfortunately, bats around the world are facing many different issues. Deforestation, urban sprawl, commercial development, and large agricultural expansion are consistently causing habitat loss throughout the world for a variety of wildlife. In some parts of the world, bats in particular are also hunted for their meat or for traditional medicine. Fruit bats are often seen as pests in fruit orchards around the world, due to the misunderstanding that they eat harvestable fruit. In reality, bats usually consume only very ripe fruit from trees, whereas farmers harvest unripe fruit so it will not become overripe before it gets into the market. The use of pesticides and other chemicals can also cause health issues if they get into a bat's system. Pesticides can block the ability of bats to echolocate, making finding food and a roost nearly impossible. Finally, in recent years an invasive disease called White Nose Syndrome has been taking huge tolls on the populations of North American bats. White Nose Syndrome has already killed millions of bats throughout the northern and eastern United States and it is known to be the worst wildlife disease we have ever recorded. Researchers and government departments throughout the country are working on finding ways to combat the effects of the disease.

Bats are also suffering from misinformation and a general lack of knowledge. In many parts of the world, including some parts the media, bats are consistently given a negative portrayal. Many people don't understand the huge environmental and economic benefits that bats provide. Education therefore also plays a huge role in bat conservation, as people are far more likely to want to help bats if they understand them.



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