

# FOOTPRINTS - humans and animals walking





#### Aim

To enable children to identify animal tracks and compare their walking habits to that of animals and birds in nature.

#### **Objectives**

#### This lesson will enable pupils to:

- Investigate how we can track animals' movements.
- Learn how far different animals walk from their habitats each day.
- Compare how far we walk each day from our habitat and what we can do to walk more.

#### Resources

- 'Animals, footprints and distances' resource sheet (available at the end of this file)
- Washing line and some pegs (optional)
- A bag of flour (for pupils to look at their own shoe prints in class – optional)
- Instructions to make a footprint trap.
   Many options are available online.
   Simply search 'animal footprint trap' (optional for at home extension).

#### **Curriculum links**

- SCIENCE animals, investigation, measurement, classification
- GEOGRAPHY
- PSHE/HEALTH AND WELLBEING
- ENGLISH/WELSH/LANGUAGES
  - creative writing, discussion

## **Preparation**

Prior to the session, print multiple copies of the accompanying worksheet titled 'Animals, footprints and distances' available at the end of this document. Keep one copy for yourself, then cut up the other copies and keep all cut up pieces together in a set. Provide one set to each group in the class. We recommend small groups of 4/5 pupils work together on this activity.



## Introduction

- Introduce children to the idea of footprints and how these can be used to identify which animals have been in a particular area.
- You can also show a short introductory video on animal footprints and tracking. There are many available online.
- Explain that pupils will be using their detective skills to match some tracks to some animals.
- They will also be looking at how far these animals travel each day and thinking about how we, as humans, travel each day.

## Development



#### Part 1

 Start by asking pupils to think about their own footprints they leave behind in the snow/mud/sand. Are these prints of our shoes or wellington boots?
 What about the prints we may leave in the sand (barefoot prints)? What might these tell us about the people who have left them? What can we measure to give us some clues?



**OPTIONAL PRACTICAL ACTIVITY:** have a tray with damp sand in (or sprinkle flour onto tray/bow or a small section of the floor) and invite pupils to put one foot in the tray to see what print their shoes leave behind (or do it barefoot). How do they compare to each other's and the teacher's footprint?

Talk about how animals also leave footprints, but they don't wear shoes!

# Part 2

**CARD MATCHING ACTIVITY.** Ask each small group of pupils to work together to try and match the prints to the animals (using the 'Animals, footprints and distances' resource sheet). Hold back the 'Distances' cards for the time being, we'll use these later.



- Can pupils match the prints to the animals? What are their reasons for the matches they make? You can use either the photographs or drawings of the footprints, depending on how easy/hard you wish to make the task (or use both). Share the answers and discuss any discrepancies.
- Of the animals discussed, talk about how far they think each of these animals walks/flies from its home each day (e.g. short, medium or long distance). Ask pupils to line up the photos of the animals from the ones that walk the least to the ones that walk the most. Do this as a whole class on the optional washing line or a desk.



Discuss answers and allow opportunities for pupils to change their choices, then reveal answers (provided). Alternatively, hand out the 'Distances' cards and let children match these to the animals, then order them from shortest distance travelled to furthest distance travelled in a day.

- Now ask children 'What might our own habitat be?'. Move on to discussing how far each pupil walks from their habitat (home) each day. This is also an opportunity for pupils to look at online maps etc. 'Do you walk to school? How far is this?'. Pupils can each estimate how far (distance) they walk each day or how long (time) they spend walking each day.
- We will now try and match pupils to the animals based on the distances and how they travelled to school on that day.
  - Those who walked to school all the way are like the long-distance walking animals (i.e. grey squirrel or fox). This can include those that cycle or scoot all the way to school.
  - Those who did a Park and Stride or hopped off the bus early are like the medium-distance walking animals (i.e. hedgehog or rabbit).
  - Those who came to school by car today are like the short distance animals (i.e. wood pigeon or frog). This includes those travelling by bus or train.
- How can each pupil incorporate more walking into their day to become the next animal along the chain? Pupils can also make a pledge to walk, cycle, scoot or Park and Stride more if they wish.
- Aim to create an inclusive environment during this discussion. Pupils who
  live far away from school, or who might not be able to walk to school for other
  reasons, should not feel discouraged. Remind pupils that wheeling to school,
  doing Park and Stride, or hopping off the bus early are all great alternatives.

# **Plenary**



Summarise the day's learning – animals and birds leave footprints like humans do. We can use this



information, and if we think like detectives, we can understand which animals leave which footprints and how far they may walk or fly each day. What can each child do to incorporate more walking into their day and move from being a frog to a fox (for



example)? Can those who already walk lots (i.e. the foxes in the class) share how they achieve this with the rest of the class and encourage others to do the same if they can?

## **Extension**

- We've looked at human and animal/bird footprints here. But have you heard of carbon footprint and digital footprint? Can you figure out what these might be?
- Can pupils predict what the footprints of other animals may look like an elephant? A leopard? A bear? Encourage them to draw their predictions and explain their reasons.
- What does the distance between prints tell us? Can pupils devise an experiment to test their theory (hint: walk or run in the mud and measure the distance between your prints. What can this tell us about how fast the person/animal may have been travelling?

#### At Home

- Build an animal footprint trap/insect bug trap and see which animals visit your neighbourhood. Instructions to build your trap can be found online. Simply search 'animal footprint trap'.
- Take a walk and count your steps. Can you work out the distance you have walked from the number of steps you have counted?
- Write a short story imagining that you are an animal. What might you see and hear on your adventures? What dangers might you encounter when you're travelling around?



We are Living Streets, the UK charity for everyday walking. These learning resources support participation in WOW – the year-round walk to school challenge.

For further information on WOW, visit www.livingstreets.org.uk/WOW

Get in touch: walktoschool@livingstreets.org.uk 020 7377 4900

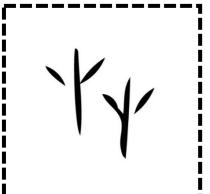


Supporting material – Animals, footprints and distances resource sheet

#### NO PRINTER NEEDED FOR THIS VERSION

For the teacher: Keep the teacher's sheets 1-3 for yourself. One at a time, put sheets 4 and 5 on the whiteboard or screen and ask pupils to try and match the footprints to the animals and ask them to have a guess about how far they think these animals travel every day.

#### FOOTPRINT DIAGRAM



#### FOOTPRINT IN SNOW



ANIMAL — wood pigeon



#### DAILY DISTANCE TRAVELLED

I don't walk that far each day, only around 40 metres.

However, can fly up to 16 kilometres a day.

#### FOOTPRINT DIAGRAM



FOOTPRINT IN SNOW



ANIMAL — frog



#### DAILY DISTANCE TRAVELLED

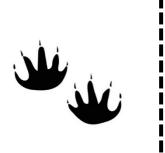
I walk around 500 metres a day



#### FOOTPRINT IN MUD

# ANIMAL — hedgehog

## DAILY DISTANCE TRAVELLED







I walk 2-3 kilometres (I may roll a little bit of the way)

I mainly travel at night.

# FOOTPRINT DIAGRAM







ANIMAL — rabbit



DAILY DISTANCE TRAVELLED

I hop up to 4 kilometres a day



FOOTPRINT IN SNOW

ANIMAL — grey squirrel

DAILY DISTANCE TRAVELLED







I walk up to 8 kilometres by day.

FOOTPRINT DIAGRAM

FOOTPRINT IN SNOW

ANIMAL — fox

# DAILY DISTANCE TRAVELLED







I walk up to10 kilometres, usually at night.

## FOOTPRINT DIAGRAM A



FOOTPRINT DIAGRAM B



FOOTPRINT DIAGRAM C



FOOTPRINT IN MUD 1



FOOTPRINT IN SNOW 2



FOOTPRINT IN SNOW 3



 ${\sf ANIMAL}-{\sf wood}$  pigeon



<u>ANIMAL</u> — hedgehog



ANIMAL — frog



## FOOTPRINT DIAGRAM D



FOOTPRINT DIAGRAM E



FOOTPRINT DIAGRAM F



FOOTPRINT IN SNOW 4



FOOTPRINT IN SNOW 5



FOOTPRINT IN SNOW 6



ANIMAL — fox



 $\mathbf{ANIMAL} - \mathbf{rabbit}$ 



ANIMAL — grey squirrel

