

# Activity 12: Walk like a dinosaur – dinosaur trackways

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Investigate the stride length of different types of dinosaur using life-size footprint cutouts.

## Learning outcomes

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Children will:

- observe and understand that animals with two legs and four legs move differently and have differently shaped feet
- understand that animals of different sizes have different stride lengths

## Resources required

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Provided in the Natural History Museum package:

- dinosaur footprints with scale
- photographs of dinosaur trackways, printed or to view on whiteboard (see Activity 11)
- photographs of emu and elephant trackways, printed or to view on whiteboard (see Activity 11)
- animations of dinosaurs walking: [nhm.ac.uk/dippy-videos](http://nhm.ac.uk/dippy-videos)
- data chart of stride length

Provided by school:

- facilities to show films/images/print images

## Activity 12: Walk like a dinosaur – dinosaur trackways

Dinosaur/animal	Stride length (centimetres)
<i>Albertosaurus</i>	300
Asian elephant	110
<i>Diplodocus</i>	238
Emu	100
<i>Hypsilophodon</i>	90
<i>Iguanodon</i>	130

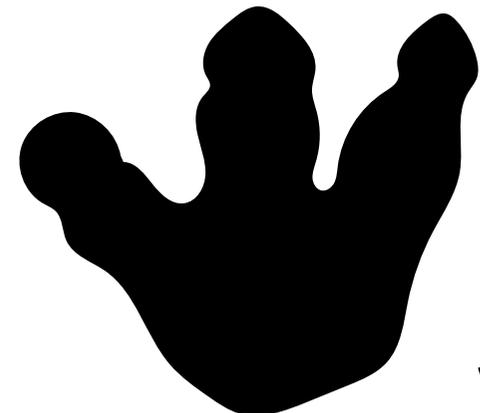


*Diplodocus*

20 centimetres



*Albertosaurus*



*Iguanodon*



*Hypsilophodon*



# Activity 12: Teacher notes

Print, cut out and construct the dinosaur and bird footprints using different coloured paper for each animal. This can take some time so this needs to be done in advance. You will need at least four of each animal footprint. It is worth laminating the footprints if you wish to use them again.

Ask the children to work in groups to use the chart of stride length data to measure out the distance between each footprint and place them on the ground to accurately represent the walking stride length of each animal. The four-legged animal footprints can look quite strange in shape because the back feet step into the front footprints distorting them slightly.

Ask them to count how many steps they take to reach the end of the trackway. Is it more or less than each animal? They could count in twos.

Watch film clips of different animals walking. Notice that four-legged animals walk differently to two-legged ones. Identify animals that walk on two legs and animals that walk on four. Do all four-legged animals always stand on four legs?

- You could discuss that *Iguanodon* and *Albertosaurus* have footprints like that of the emu, and that Dippy's footprints are most similar to the elephant footprints.
- You could link this activity to Activity 5.

## English curriculum links (Key Stage 1)

### Mathematics

#### Number and place value

Pupils should be taught to:

- count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward
- recognise the place value of each digit in a two-digit number (tens, ones)
- identify, represent and estimate numbers using different representations, including the number line
- compare and order numbers from 0 up to 100 use  $<$ ,  $>$  and  $=$  signs

## Northern Irish curriculum links (Foundation Phase and Key Stage 1)

### Mathematics and numeracy

#### Foundation: Measures

Pupils should be enabled to:

- compare two objects of different length/weight/capacity/area understand and use the language of comparison
- order three objects of different length, weight, capacity, area talk about the ordering using appropriate language
- find an object of similar length, weight, capacity, area talk about their findings in terms of 'just about the same' length, weight, capacity, area
- begin to explore the notion of conservation of length, weight, capacity in practical situations engage in discussion about their observations
- choose and use, with guidance, non-standard units to measure length/capacity/weight talk about their work

#### Key Stage 1: Measures

Pupils should be enabled to:

- understand and use the language associated with length, 'weight', capacity, area and time
- use non-standard units to measure and recognise the need for standard units
- know and use the most commonly used units to measure in purposeful contexts
- make estimates using arbitrary and standard units
- choose and use simple measuring instruments, reading and interpreting them with reasonable accuracy





## Scottish curriculum links (Early and First)

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### Number, money and measure: Number and number process

I have explored numbers, understanding that they represent quantities, and I can use them to count, create sequences and describe order. **MNU 0-02a**

### Number, money and measure: Expressions and equations

I can compare, describe and show number relationships, using appropriate vocabulary and the symbols for equals, not equal to, less than and greater than. **MTH 1-15a**

## Welsh curriculum links (Foundation Phase)

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### Mathematical development

#### Using number skills

- use number facts and relationships
- calculate using mental and written methods

