Darwin and Evolution Activity 4a: Dogs and their puppies



http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution

Suggested preparation

Presentation: Darwin and Evolution

http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution

Film: Darwin and Evolution

Professor Jim Secord helps us to understand Darwin's ideas on evolution

http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution

How long will activity take?

• 10 minutes

What do I need?

- Dogs and their puppies worksheet
- Pen

This activity asks you to look more closely at the characteristics of different types of dogs and what might happen if they breed.

What do I do?

- 1. Complete the worksheet.
- 2. Share your answers with the class.

























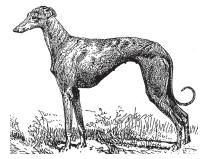
Darwin and Evolution Activity 4a: Dogs and their puppies worksheet



1. Look at the images of dogs. For each breed, name a characteristic that makes it different from the others.







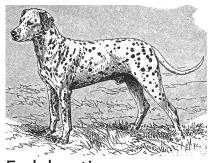
B: greyhound



C: dachshund



D: poodle



E: dalmatian

- 2. We know that offspring inherit characteristics from each parent. List what characteristics puppies of these dogs could inherit if the parents were:
 - A. A poodle and a bulldog
 - B. A greyhound and a dalmatian
 - C. A dachshund and a bulldog

Images from the Biodiversity Heritage Library. Digitised by University of California Libraries (archive.org). www.biodiversitylibrary.org

























Darwin and Evolution Activity 4b: Darwin's dogs



http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution

Suggested preparation

Presentation: Darwin and Evolution

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Activity 4a: Dogs and their puppies.

This activity introduces some of the characteristics of different dogs

How long will activity take?

What do I need?

• Information sheet about Darwin's dogs

· Letters about dogs & question sheet

• Pen

• 20 minutes

Find out about Darwin's interest in dogs through exploring some of his letters.

What do I do?

- 1. Read about Darwin's dogs and the letters that Darwin sent and received that explore dog characteristics and behaviour.
- 2. Answer the questions about the letters.

























Darwin and Evolution Activity 4b: Darwin's dogs

CORRESPONDENCE
PROJECT

http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution



Charles Darwin was a dog lover his whole life. When he was growing up, more people had working dogs if they lived in the countryside, rather just having dogs as pets.

Over the years, the Darwins owned at least 5 terriers, a retriever, a Pomeranian, a pointer and a Scottish deerhound.

As part of his research Darwin asked his correspondents to describe the characteristics and behaviours of the dogs that they knew.

Image: Charles Darwin's daughter Henrietta with a terrier – probably Polly, who is mentioned in Darwin's letter to Lucy Wedgwood. (Cambridge University Library, DAR 225: 73)

























LETTER 7105

From Asa Gray To Charles Darwin 14 February 1870

Transcribed extracts



http://www.darwinproject.ac.uk/entry-7105

Cambridge, Mass. Feb. 14. 70

My Dear Darwin

that was the case or no.... you that I had not been able to learn definitely whether washing cat-fashion—which you suggested might have come from being brought up with a cat, and I think I told ...I well remember telling you of our "Max" and his habit of

Ever Yours truly, A. Gray

Darwin Correspondence Project/Cambridge University Library (CC BY-ND 2.0)

LETTER 7722

From Ralph I. Thompson 27 April 1871 To Charles Darwin

Transcribed extracts

http://www.darwinproject.ac.uk/entry-7722



London & Provincial Bank, 27 April 1871

Dear Sir

quite young he played with a cat & her kittens and from you that I have a dog of 13 years of age mixed breed or them acquired the habit of licking his feet and cleaning his mongrel, which I brought with me from Australia when face which habit he still retains.— ...In confirmation of your friends statement I beg to inform

mouth, which he evidently imitated from them round after his tail sometimes with the end of it in his I have also noticed other habits such as running round and

R I Thompson I am Dear Sir Your most obd. Servant

LETTER 7223

From Charles Darwin

To Lucy Wedgwood (Darwin's neice)

8 June [1867–72]

Franscribed extracts

http://www.darwinproject.ac.uk/entry-7223



LETTER 7177



http://www.darwinproject.ac.uk/entry-7177

Down June 8th

My dear Lucy

I hear that your Dog is a barker: please observe for me whether the (upper) lips are at all retracted or everted* when he barks & just before he barks. My impression is that if you open a dog's mouth lips almost hide teeth; but that they are much more exposed, when he barks, which implies some contraction or eversion.

You are so good an observer that I know I can trust your conclusion. The Bark ought not to be a savage one, as that wd give tendency to snarl— a joyful bark or bark of good spirits wd. be best.—

Think of any fact about expression of any emotion in any of your birds.—

Yours affect.

C. Darwin

Our Polly will not bark except as she rushes away to some supposed enemy in forest.

* This means if the dogs lips are drawn back (retracted) or turned out (everted).

Darwin Correspondence Project/Cambridge University Library (CC BY-ND 2.0)

The Cottage, Guard Bridge, Fifeshire. N.B. April 29/70

My Dear Mr Darwin,

... It will be a very great pleasure to me to send a Deerhound puppy—which shall certainly be of the very best...

No dog can be better for docility, attachment, and good behaviour about a house than the pure Scotch deerhound—but greater intelligence and a more decided turn for guardianship, with more of the mastiff temper, can be obtained in a dog partaking of the old wolf-hound blood, while at the same time the appearance of the deerhound is preserved...

I shall make a point of seeing about it without delay, and giving full particulars before you make choice...

Mrs Cupples desires to be remembered to Mrs Darwin—and I remain

My dear Mr Darwin faithfully yours George Cupples Darwin Correspondence Project/Cambridge University Library (CC BY-ND 2.0)

Darwin and Evolution

Activity 4b: Darwin's dogs

Letter questions

Letters 7105 & 7722

1. In these letters the writers describe the behaviour of their dogs; what do you think Darwin was trying to find out more about?

| 1. What type of dog | does Mr Cupples | recommend foi | Darwin in | terms of its | good |
|---------------------|-----------------|---------------|-----------|--------------|------|
| behaviour? | | | | | |

- 2. What does he think would give the dog added intelligence?
- 3. Does Mr Cupples feel happy to provide Darwin with a dog? How do you know?

Letter 7223

Darwin observed the behaviour of dogs in great detail, keen to find out how they behaved in different situations and whether some dogs behaved differently to others. His dog was called Polly.

- 1. What is Darwin interested to find out about when Lucy's dog barks?
- 2. Why do you think he wants her to observe a 'joyful bark' rather than an angry one?
- 3. Apart from the fact that Lucy has a dog, why has Darwin chosen to ask her these questions?

























Darwin and Evolution Activity 4c: Observing dog behaviour



http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution

Suggested preparation

Presentation: Darwin and Evolution

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Activity 4b: Darwin's Dogs

This activity introduces Darwin's interest in dogs

How long will activity take?

- Dog Log 10 minutes per day for 1 week
- Letter writing 20 minutes

What do I need?

- Dog Log
- Blank letter template
- A pen/pencil

Carry out your own research by completing the Dog Log and writing a letter to describe your findings.

What do I do?

- 1. Choose a dog to observe. It could be a pet dog or even one on television or the internet. Make sure you don't do anything to hurt or anger the dog; just watch it in different situations.
- 2. In your Dog Log, note down the type of dog it is and what it looks like.
 - Does it have long or short legs?
 - What colour is it?
 - What type of coat does it have? Long or short hair? Smooth or scruffy?
 - What kind of nose does it have?
- 3. Make notes of its behaviour in different situations.
 - Does the dog bark when someone comes to the door?
 - When else does it bark or wag its tail?
 - Can you tell when it is excited or if it seems bored?
 - Does it seem more interested in some humans than others? Why?
 - What happens at feeding time?
- 4. Share your log and compare your results with others.
- 5. Using the blank letter template, write a letter to Darwin to describe what you have found out.

























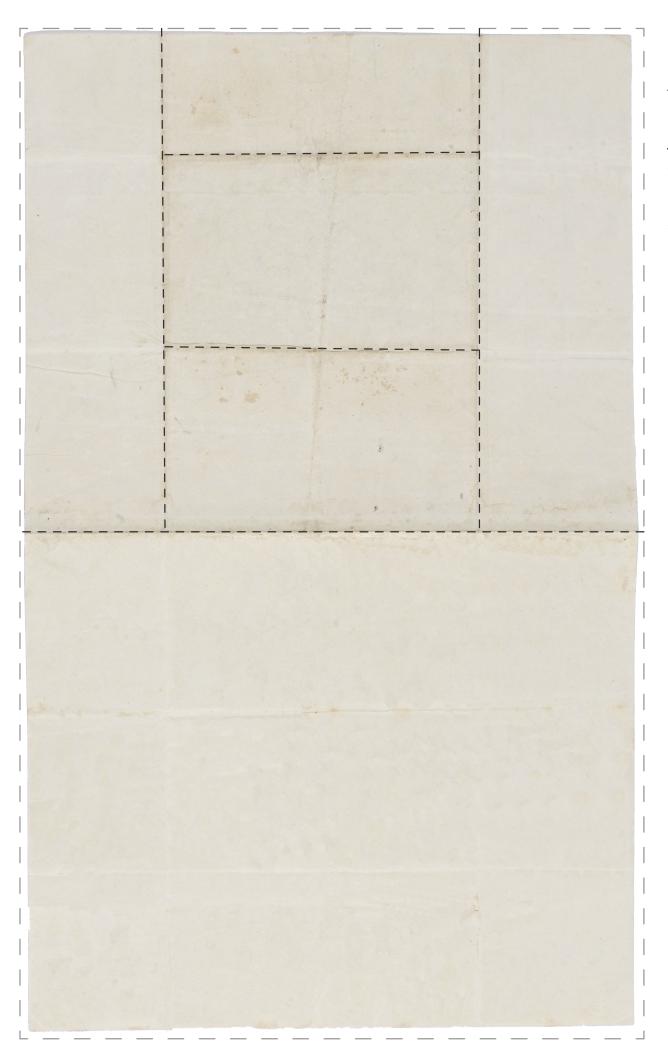
Darwin and Evolution Activity 4c: Dog Log

http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution

| This Dog Log belongs to: | | |
|---|---------------------------------------|--------------|
| Dog's name: | | Dog's breed: |
| Dog's Characteristics | | |
| Size: | Colour: | Legs: |
| Coat: | Ears: | Nose & Face: |
| Other: | | |
| Sketches: (If you want to do a quick sketch o | of the dog or any of its behaviour/ex | (pressions) |

| 7 2 2 2 2 7 | | | | |
|------------------------------|----------------------------|---|--------------|---|
| http://www.darwinproject.ac. | :.uk/learning/7-11/dar | http://www.darwinproject.ac.uk/learning/7-11/darwin-and-evolution | | |
| Date Situa | Situation Be | | Expression 1 | Notes |
| e.g. e.g. 20 June Doorb | e.g. Doorbell rings Run | at the door | | e.g. Only does this when the postman comes |
| | | | | |
| | | | | |
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Blank letter template Darwin Correspondence Project (CC BY-ND 2.0)



Blank letter template